

PUBLIC FINANCE FOR CHILDREN - NUTRITION (PF4C-N) IN ASIA-PACIFIC

Foreword

Every child has the right to nutrition. Good nutrition sets children on the path to survive and thrive. Well-nourished children grow, develop, learn, play, participate and contribute – while malnutrition robs children of their full potential, with negative consequences for children, nations, and the world. Globally, an estimated 149 million children under five are stunted, 45 million are wasted, and almost 39 million are overweight. The Asia-Pacific region carries the largest share of the burden of malnutrition globally. Half of the children in South Asia and one in three in East Asia and the Pacific are either stunted, wasted, or overweight. The deleterious impact of COVID-19 may further exacerbate these figures. As a result, the growth, survival, and development of millions of children is at risk.

In 2015, the world committed to the Sustainable Development Goals (SDGs), including eliminating malnutrition in all its forms by 2030. However, levels of financing for nutrition remain gravely inadequate to achieve the scale of nutrition programming that is needed to meet the SDG goals. The financing shortfalls for food and other social services are likely to be further compounded by the impacts of the COVID-19 pandemic. As in many parts of the world, nutrition has historically been a relatively low priority for many countries in the Asia-Pacific region, often subsumed within health-related goals.

Further, the engagement of nutrition actors in national health financing dialogues and in leveraging national public budgets to improve nutrition outcomes is hindered by limited understanding of the application of public finance concepts to planning, budgeting, and monitoring of expenditure performance of nutrition programmes. Moreover, most nutrition interventions are externally financed, and external actors often carry out budgeting, costing and expenditure tracking sporadically and using international rather than nationally embedded tools and methods. As such, the various entry points and opportunities within public finance management (PFM) that can influence nutrition allocation and spending in the annual planning and budgeting cycle are often not identified or known.

Recognizing the need to build the capacity of national stakeholders in leveraging public budgets to improve nutrition outcomes, the UNICEF East Asia and Pacific and South Asia Regional Offices collaborated with Oxford Policy Management (OPM) and Genesis Analytics to develop a new training manual on Public Finance Management for Children-Nutrition (PF4C-N), with a focus on South Asia and East Asia and the Pacific. The manual is based on the UNICEF's global framework on Public Finance for Children that aims to support governments to realize children's rights through the best possible use of public budgets.

This manual, along with an e-learning course, is part of the PF4C-N training toolkit. The manual provides 'how-to' tools to apply PFM concepts and principles in the national planning and budgeting frameworks to gradually improve the adequacy, equity, efficiency and cost-effectiveness of nutrition programmes and expenditure. The advantage of the learning approach used in this manual is that it provides a holistic understanding of the mechanisms behind public financing, how the various financing aspects fit together, and a means to systematically assess the different entry points into the policy and budget cycle that might offer opportunities for improving national nutrition budgets and expenditure. This approach enables the users of the PF4C-N manual to apply PFM concepts to their country context to understand where their efforts are best placed on improving financing for nutrition.

This manual and the related e-learning course is one of the first attempts of UNICEF to provide an in-depth understanding of the financing aspects of nutrition for governments, UNICEF staff, and partners. With the instruments it offers, we are confident that it will enable a much more active engagement in PFM-based evidence generation and advocacy for nutrition in the region. Only by addressing the key financing bottlenecks in nutrition would we be able to take progressive strides towards ending all forms of malnutrition and securing more prosperous, cohesive, and resilient societies.



Myo- Zin Nyunt
Deputy Regional Director
UNICEF Regional office East Asia Pacific



Sun Ah Kim Su
Deputy Regional Director
UNICEF Regional office for South Asia

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Lead authors: Tomas Lievens (Genesis Analytics); Christiane Rudert, Harriet Torlesse, Zivai Murira, Mueni Mutunga (UNICEF); Helen Connolly and Mysbah Balagamwala (OPM).

Technical reviewers and contributors: Roland Kupka, Christina Popivanova, Elizabeth Drummond, Anirudra Sharma, Bindu Panthi, Karan Courtney Haag, Yendra Rai, Sevara Hamzaeva (UNICEF); Katie Bullman (Genesis Analytics) and Sarah Shahzad (OPM).

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Layout and design work: Tanat Supichayangkun and Sanele Nkomani

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List of abbreviations

ANC	Ante-natal care	GNR	Global Nutrition Report
BCR	Benefit–Cost Ratio	HNP	Health, Nutrition, and Population
BIA	Benefit Incidence Analysis	HP	Health Post
CBHI	Community-Based Health Insurance	ICER	Incremental Cost-Effectiveness Ratio
CEA	Cost-Effectiveness Analysis	IFA	Iron and Folic Acid
CMAM	Community-Based Management of Acute Malnutrition	IGT	Intergovernmental Transfer
CRC	Convention on the Rights of the Child	IMAM	Integrated Management of Acute Malnutrition
CSO	Civil Society Organisation	IMF	International Monetary Fund
DAC	Development Assistance Committee	IRC	International Rescue Committee
DALY	Disability-Adjusted Life Year	IRR	Internal Rate of Return
DGF	Decentralised Government Finance	IYCF	Infant and Young Child Feeding
DIB	Development Impact Bond	LGU	Local Government Unit
DLI	Disbursement Linked Indicators	LMIC	Low- and Middle-Income Country
DRM	Domestic Resource Mobilisation	M&E	Monitoring and Evaluation
GDP	Gross Domestic Product	MAM	Moderate Acute Malnutrition
GFF	Global Financing Facility	MHO	Mutual Health Organisation
GIF	Global Innovation Fund	MTEP	Medium-Term Expenditure Programme
GNI	Gross National Income	NA	National Account

NGO	Non-Governmental Organisation	SAM	Severe Acute Malnutrition
NHA	National Health Accounts	SDG	Sustainable Development Goal
NPV	Net Present Value	SHA	System of Health Account
NTP	National Target Program	SHP	Sub-Health Post
ODA	Official Development Assistance	SOC	Social Opportunity Cost of Capital
OECD	Organisation for Economic Co-Operation and Development	SUN	Scaling Up Nutrition
OTP	Outpatient Therapeutic Programme	THE	Total Health Expenditure
PEFA	Public Expenditure and Financial Accountability	UHC	Universal Health Coverage
PER	Public Expenditure Review	VAT	Value Added Tax
PER-N	Public Expenditure Review in Nutrition	VfM	Value for Money
PETS	Public Expenditure Tracking Survey	WHA	World Health Assembly
PF4C-N	Public Finance for Children - Nutrition	WHO	World Health Organization
PFM	Public Financial Management		
PPP	Public–Private Partnership		
PV	Present Value		
RUTF	Ready-To-Use Therapeutic Foods		
SAI	Supreme Audit Institution		



MODULE

1

Situating the Learning Programme



Overview of the module

A. Why is this module important?

This module explains how public finance concepts and approaches can be applied to nutrition programming and serves as an introduction to the course. Further, it will show how this course fits into the broader work being undertaken by UNICEF on Public Financial Management for Children (PF4C).

B. Why does this matter to nutrition stakeholders?

This module places public finance for children - nutrition (PF4C-N) in the context of the nutrition situation and policy context in the region and highlights how opportunities within public finance management can be used to influence allocation and spending decisions to improve coverage of nutrition interventions in the health system (and therefore nutrition outcomes). The module provides the framework for the material to follow in other modules, as well as referencing UNICEF's PF4C Programme Framework.

C. Learning objectives

By the end of this module, you will:

- have an overview of the status of malnutrition and its trends across Asia;
- be able to understand what determines malnutrition and the different policy interventions available, in particular nutrition interventions delivered through the health system; and

- be introduced to the PF4C-N framework and understand why and how each module of the course matters for the nutrition financing agenda.

D. What does this module cover?

This module presents an overview of the context (i.e., the nature and scope of the malnutrition challenge across Asia, including how COVID-19 has affected it) and the rationale behind the learning programme. The conceptual framework for the course is introduced in this module, along with an explanation of what this course covers and why it matters for the nutrition agenda.

E. Reading materials

Core reading

- UNICEF (2019) 'The state of the world's children 2019: children, food and nutrition: growing well in a changing world', UNICEF, New York.
- UNICEF (2020) 'UNICEF Nutrition Strategy 2020–2030', UNICEF, New York.
- UNICEF (2017). UNICEF's Engagements in Influencing Domestic Public Finance for Children (PF4C): A Global Programme Framework. UNICEF, New York
- World Health Organization (WHO) (2019) Essential nutrition actions: mainstreaming nutrition through the life-course', WHO, Geneva.

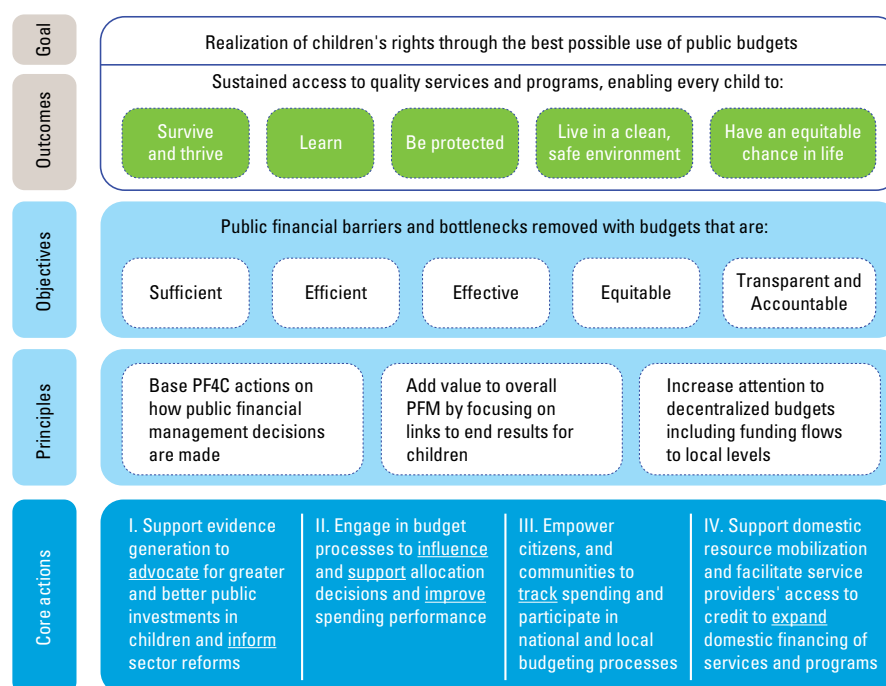
1. Background on Public Finance for Children (PF4C)

The rationale for the engagement of UNICEF in public financial management (PFM) is grounded in the Convention on the Rights of the Child (CRC). Article 4 of the CRC directs States to ‘invest in child rights to the maximum extent of available resources’. General Comment No. 19 on Public Budgeting for the Realization of Child Rights guides States on how to fulfil and report on this obligation.¹ It provides specific

guidance for member states with regard to realizing children’s rights at each stage of the budget process, as well as for domestic mobilization of additional resources.

In support of the realization of the CRC, the goal of UNICEF’s PF4C work is to support the best possible use of public budgets (Figure 1).²

Figure 1: Overview of UNICEF’s PF4C Programme Framework



As shown, the Programme Framework has the following five objectives:

1. Sufficient resources are allocated for child-related policies and programmes, including by mobilizing additional funds, for full implementation;
2. Spending for children is made more efficient by timely disbursement and reducing leakages;
3. Results-based budgeting and value for money approaches are adopted for more effective spending for children;
4. Resources are better distributed to promote equitable spending with greater attention to disadvantaged groups and areas; and

¹ UNCRC (2016). Committee on the Rights of the Child General comment No. 19 on public budgeting for the realization of children’s rights (art. 4), available at <<https://docstore.ohchr.org/SelfServices/FilesHandler.ashx?enc=6QkG1d%2fPPRiCAqhKb7yhsqIkirKQZLK2M58RF%2f5F0vHXnExBBGbM8arvsXpbQtFqy5IM9w-jdpzdQWNBmhRXy5GddCXwk43ItcbNBFLtyueX%2b6YpzPJHmwp3k68ATyNj>>.

² UNICEF (2017). UNICEF’s Engagements in Influencing Domestic Public Finance for Children (PF4C): A Global Programme Framework. (UNICEF, New York 2017), available at <https://www.unicef.org/sites/default/files/2019-12/UNICEF_Public_Finance_for_Children.pdf>.

5. Citizens including children and adolescents are empowered to monitor and participate in budget processes for more transparent and accountable spending.

To implement the Framework, UNICEF, under its 2018-2021 Strategic Plan, undertook organisation-wide efforts to build the foundation in terms of capacity, knowledge, and partnerships among its Social Policy staff. Recognizing that all UNICEF

programming sectors need to be able to influence budget decisions and performance of budgets, this PF4C-N Learning Programme now aims to build the capacities of UNICEF Nutrition staff.

However, this Programme is not just designed for UNICEF staff. Rather, it presents finance concepts and approaches to all actors involved in the national budget cycles relevant for nutrition programming.

2. Malnutrition in Asia

There are three main forms of malnutrition—undernutrition (stunting and wasting), micronutrient deficiencies, and overweight. These different forms are described in Table 1. The simultaneous presence of all forms of malnutrition in a country is known as the ‘triple burden of malnutrition’ and is an increasing concern in Asia. The triple burden can manifest at the

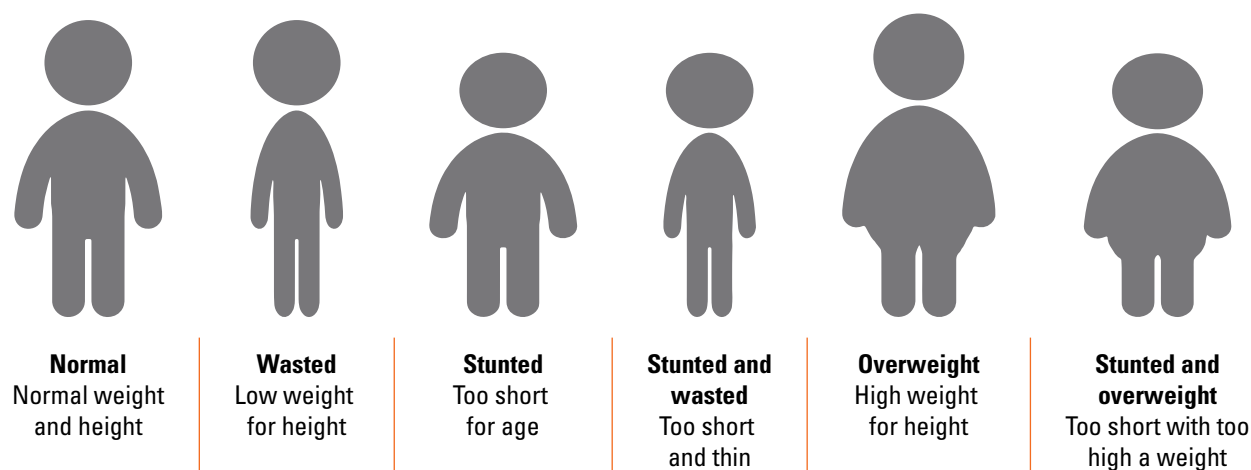
level of a country, a community, a household, or even an individual: a person can for example be both stunted and wasted, or stunted and overweight, at the same time (Figure 2), or can be stunted or wasted in early life and overweight later in life. Children of normal weight and height can be deficient in micronutrients.

Table 1: Definition of the different forms of malnutrition

Types of malnutrition	Description
Stunting	A form of growth failure in which a child is too short for his or her age and is measured using height-for-age nutritional index. Also referred to as chronic undernutrition.
Wasting	A child with wasting is too thin for his or her height and is measured using weight-for-height nutritional index. It is also referred to as acute malnutrition. Acute malnutrition also includes children with a low mid-upper-arm-circumference or bilateral pitting oedema.
Micronutrient deficiencies	Deficiency of vitamins or minerals resulting from inadequate dietary consumption (intake) and infectious diseases (affecting absorption and metabolism). Also referred to as ‘hidden hunger’.
Overweight and obesity	Excessive fat accumulation that presents a risk to health, measured using weight-for-height in children under the age of five and body mass index in older children and adults.

Source: Development Initiatives (2018), UNICEF (2019)

Figure 2: The multiple forms of malnutrition



All countries aim to scale up nutrition interventions to achieve the World Health Assembly's (WHA) targets for 2025.³ WHO has also developed revised targets

for 2030 to align with the Sustainable Development Goals (SDGs), as shown in Table 2.

Table 2: Global WHA targets for 2025 and SDG targets for 2030

2025 target	2030 target
40% reduction in the number of children under the age of five who are stunted	50% reduction in the number of children under the age of five who are stunted
50% reduction in anaemia in women of reproductive age	50% reduction in anaemia in women of reproductive age
30% reduction in low birthweight	30% reduction in low birthweight
No increase in childhood overweight	Reduce and maintain childhood overweight to less than 3%
Increase the rate of exclusive breastfeeding in the first six months up to at least 50%	Increase the rate of exclusive breastfeeding in the first six months up to at least 70%
Reduce childhood wasting to less than 5%	Reduce childhood wasting to less than 3%

Source: WHO and UNICEF (2018)

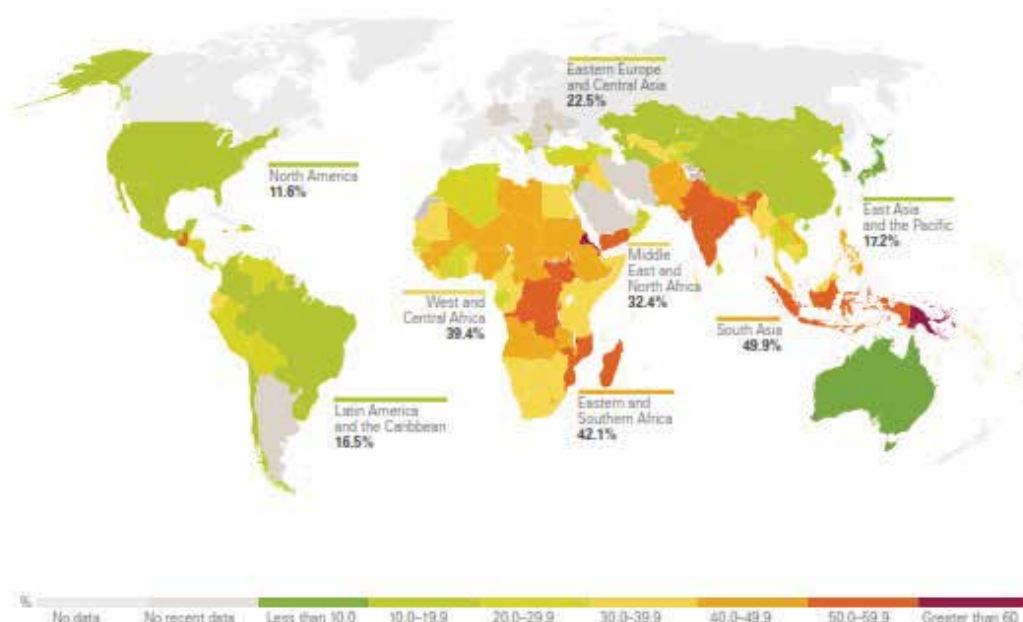
³ Targets for the year 2030 have been proposed (WHO and UNICEF, 2018).

2.1 Prevalence of malnutrition in Asia

While progress is being made worldwide, undernutrition remains severe in Asia and overweight afflicts an increasing number of children. Globally, one in three children under the age of five are

stunted, wasted, and/or overweight. In East Asia and Pacific, this number is almost one in five, while in South Asia it is one in two (see Figure 3).

Figure 3: Proportion of children under the age of five who are stunted, wasted, or overweight, 2018

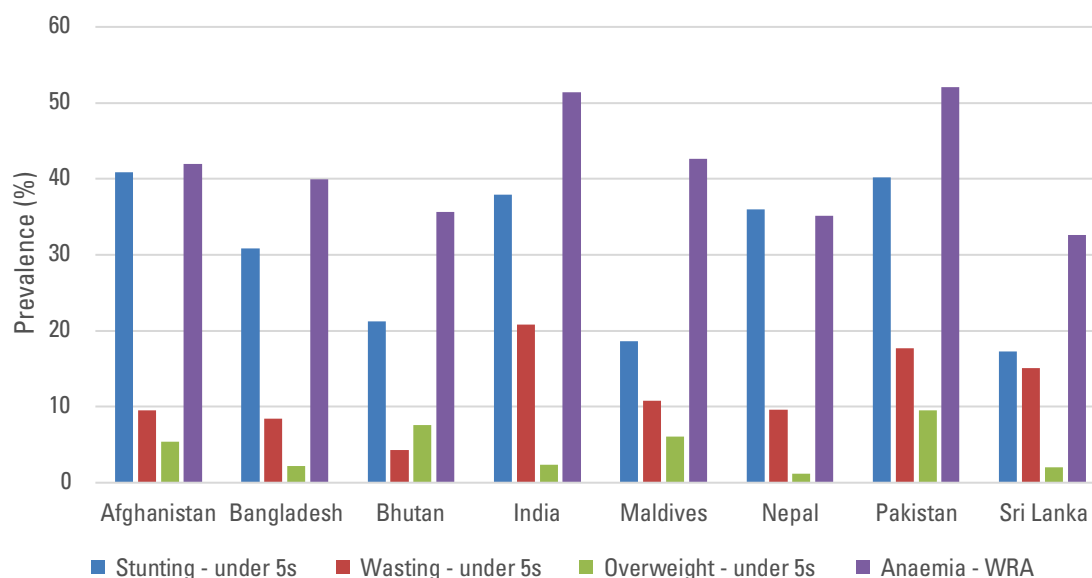


Source: UNICEF (2019)

The prevalence of stunted children under the age of five in Asia has decreased (from 38% in 2000 to 23% in 2018) but the numbers in Asia still remain high, with about two-fifths of all stunted children living in South Asia (UNICEF, WHO, International Bank for Reconstruction and Development, and World Bank, 2019). Asia is also home to the majority of children under five who are wasted: of the 49.5 million children in the world who are wasted, 33.8 million live in Asia. At the same time, the proportion of overweight children under the age of five has

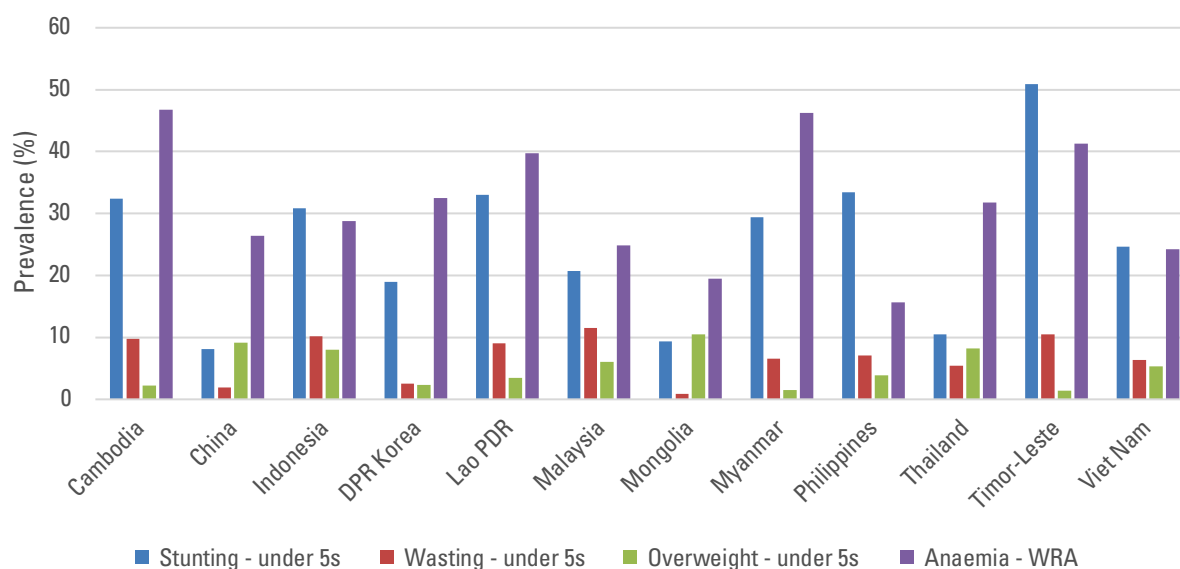
increased in low- and middle-income countries and half of the world's overweight children under the age of five live in Asia. Southeast Asia, in particular, has seen a significant increase in the share of overweight children under the age of five (from 3.2% in 2002 to 7.7% in 2018). Anaemia among adolescent girls and women remains a concern, with no progress globally (anaemia levels increased from 31.6% in 2000 to 32.8% in 2017) or in Asia (Development Initiatives, 2018).

Figure 4: Nutrition outcomes in South Asia



Source: UNICEF, WHO, World Bank (2019) for stunting, wasting and overweight (latest data available as at May 2019), plus more recent national published data for Bangladesh, Bhutan, and Pakistan. See also WHO Global Health Observatory Data Repository for anaemia (latest data available as at 2016)

Figure 5: Nutrition outcomes in East Asia



Source: UNICEF, WHO, World Bank (2019) for stunting, wasting and overweight (latest data available as at May 2019), plus more recent national published data for Indonesia, Lao PDR, and Mongolia. See also WHO Global Health Observatory Data Repository for anaemia (latest data available as at 2016)

There is variation in the prevalence of malnutrition between the countries in South Asia and East Asia, as can be seen in Figure 4 and Figure 5. Variation in the prevalence of malnutrition also exists between different regions or socioeconomic groups within a country. For example, in Lao PDR, only 20% of children belonging to the richest 20% were stunted compared to 61% in the bottom 20% (Tandon et al., 2016). We discuss within-country inequities through a public finance lens in more detail in Module 9.

The GNR tracks progress against the WHA 2025 targets for each country.⁴ As can be seen in Table 3, the progress is variable depending on country and target. For example, most countries have made progress towards achieving the stunting target (although only five are on track to reach the goal); there has been no progress in most countries in reducing the prevalence of anaemia and many countries have been unable to reduce levels of wasting among children. It is clear that much more vigorous action needs to be taken to meet the WHA 2025 targets.

Table 3: Progress towards WHA targets for 2025, by country

Country	Stunting	Anaemia	Low birthweight	Over-weight	Breast-feeding	Wasting
Afghanistan						
Bangladesh						
Bhutan						
Cambodia						
China						
DPR Korea						
India						
Indonesia						
Lao PDR						
Malaysia						
Maldives						
Mongolia						
Myanmar						
Nepal						
Pakistan						
Philippines						
Sri Lanka						
Thailand						
Timor-Leste						
Viet Nam						

Source: GNR 2018 (<https://globalnutritionreport.org/resources/nutrition-profiles>)

Notes: Dark green = on course, light green = some progress, red = no progress or worsening, grey = no data available

⁴ The Global Nutrition Report (GNR) uses a set methodology and monitoring rules developed with technical input from WHO and UNICEF to track a country's progress against the WHA indicators. Interested participants can learn more on the [GNR website](#).

2.2 Impact of COVID-19 on Nutrition

Due to its geographic proximity and various links with China, the Asia-Pacific region has been hit hard by the COVID-19 since the beginning of the pandemic.⁵ As of September 2021, the region has recorded 55.3 million cases, whilst the overall death rate recorded lies at more than 1.8 million.⁶

To minimize transition and slow the spread of the virus, governments across the region have implemented strict containment and mitigation measures. Despite a successful initial response, the region is currently suffering from the renewed surge in cases related to the Delta variant and the slow vaccine rollout. Vaccination rollout across the region differs due to levels of access and effective implementation - over half of the region's countries have been unable to administer more than 15 vaccines per 100 inhabitants, whilst, conversely, China has recorded administering approximately 50 doses per 100 people.⁷

The pandemic has had a devastating effect on access to nutrition and food security worldwide.⁸ The socio-

economic impacts of COVID-19 are exacerbating pre-existing challenges, such as gaps in food security and access to nutrition.⁹ Across the Asia region, household food consumption and nutrition has been devastatingly affected by income reductions, limitations in food access, and loss of jobs. Renewed lockdowns and quarantine regulations are causing shortages of labour, disrupting logistics, and resulting in reduced crop production.¹⁰

Of great concern is the nutritional status of the most vulnerable. School closures have led to suspensions in free-school meals, putting children from low-income households at a higher risk for food insecurity. Vulnerable groups are, furthermore, very likely to experience increased incidence of micronutrient deficiencies, as micronutrient-rich foods are highly vulnerable to disruptions in food supply chains. Simultaneously, food affordability issues have been exacerbated (Figure 6), and an additional 1.9 billion people now suffer from unbalanced nutrition due to a lack of affordability.¹¹

5 OECD (2020), Asia-Pacific countries have managed COVID-19 crisis relatively well, but major challenges remain in low-middle-income countries <<https://www.oecd.org/china/asia-pacific-countries-have-managed-covid-19-crisis-relatively-well-but-major-challenges-remain-in-low-middle-income-countries.htm>>

6 Calculated from WHO estimates.

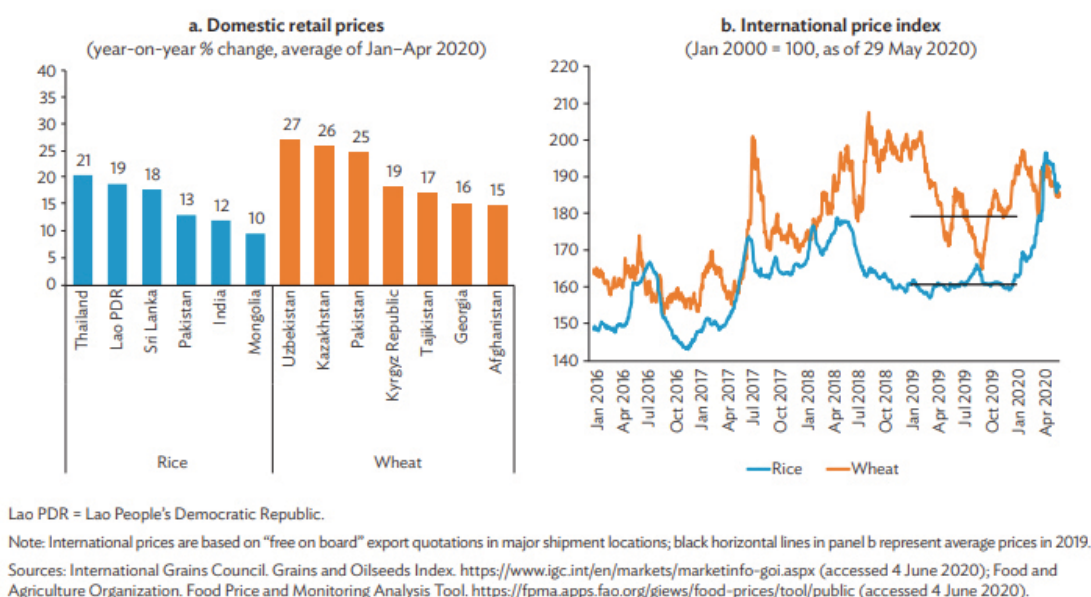
7 Ibid

8 WHO (2021) *Going hungry – how Covid-19 has harmed nutrition in Asia and the Pacific*. Available at <<https://www.who.int/cambodia/news/detail/01-02-2021-going-hungry-how-covid-19-has-harmed-nutrition-in-asia-and-the-pacific>>.

9 UNICEF (2020) Asia and the Pacific Regional Overview of Food Security and Nutrition 2020. *Maternal and child diets at the heart of improving nutrition*. "Highlights" <<https://www.unicef.org/eap/reports/asia-and-pacific-regional-overview-food-security-and-nutrition-2020>>

10 Food and Agricultural Organisation (FAO) 2020. A Battle Plan for Ensuring Global Food Supplies during the COVID-19 Crisis. <http://www.fao.org/news/story/en/item/1268059/code/>.

11 UNICEF (2020) Asia and the Pacific Regional Overview of Food Security and Nutrition 2020. *Maternal and child diets at the heart of improving nutrition*. "Highlights" <<https://www.unicef.org/eap/reports/asia-and-pacific-regional-overview-food-security-and-nutrition-2020>>

Figure 6: Rice and Wheat Prices¹²

Stark figures highlight this growing nutritional crisis. In 2019, over 350 million undernourished people lived in Asia and the Pacific, equivalent to around half the total population.¹³ Owing to the pandemic, it is

estimated that 24 million additional people are at risk of acute food insecurity. Further, there are 6.7 million more children under 5 globally at risk of wasting, 3.8 million of which are in Southern Asia.¹⁴

Box 1

Impact of the COVID-19 Pandemic on Nutrition in Cambodia

In Cambodia, households have been forced to adopt negative coping mechanism owing to economic hardship associated with the pandemic. As a result of the increase in food pricing, half of Cambodian households have had to reduce their food intake, which has resulted in a decrease in intake of important nutrients, such as iron or vitamin C.¹⁵ In some instances, even more severe household coping strategies have been adopted. This includes reducing essential health- and education-related spending to afford food supplies.

The negative impact of this reduction in food intake, and lack of diet diversity, has been disproportionately felt by women and children. The predominant impact of food insecurity on the most vulnerable members of the household is reflected in empirical data, with research finding that 30% of women consumed a diet which did not incorporate the elements of minimum diversity in August 2020, a rate which increased to 50% by October.

To counteract the growing food insecurity in Cambodia, the government has implemented a social cash transfer program targeting over 600,000 of the most vulnerable Cambodians.

¹² Kim, K., Kim, S. and Park, C.Y., 2020. Food Security in Asia and the Pacific amid the COVID-19 Pandemic.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

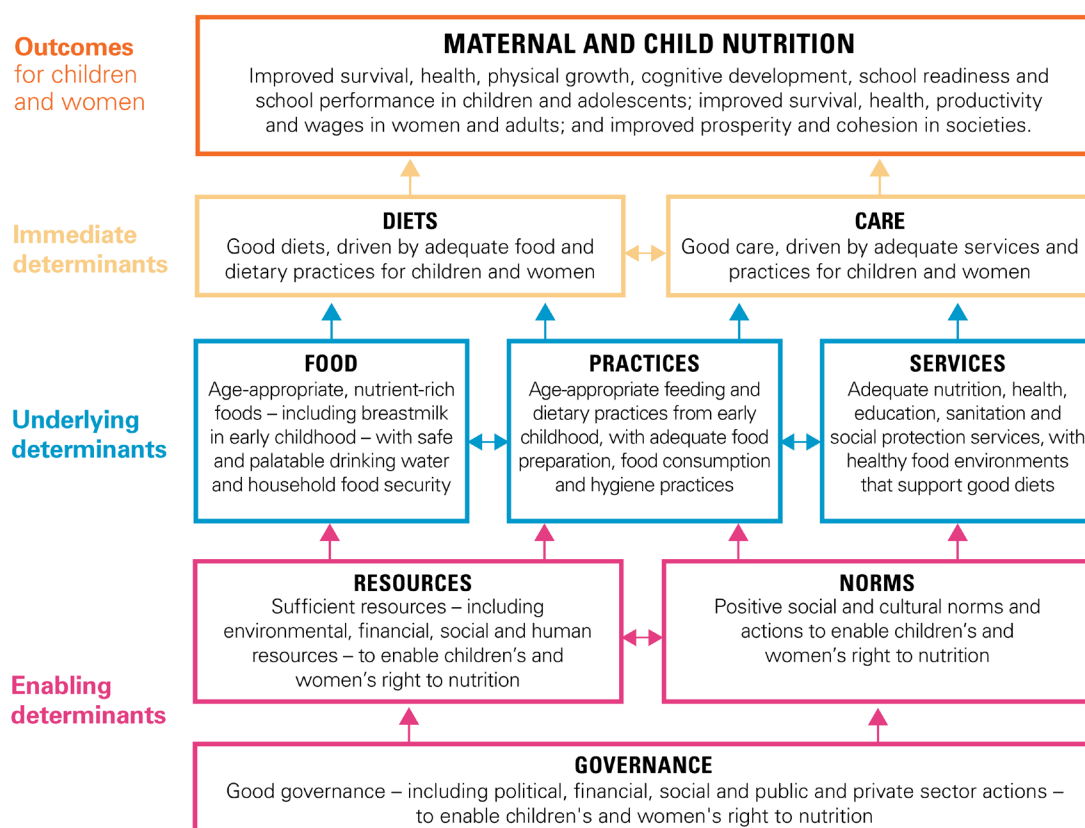
3. Determinants of good nutrition and impacts of malnutrition

3.1 Conceptual framework of the determinants of good nutrition

UNICEF's conceptual framework on the determinants of maternal and child nutrition provides conceptual clarity about the enabling, underlying, and immediate determinants of adequate maternal and child nutrition; the vertical and horizontal interconnectedness of these determinants; and the positive survival, growth, development, performance, and economic outcomes resulting from improved nutrition for children, adolescents, and women

(Figure 7). Immediate determinants of maternal and child nutrition are good diets and good care. These are affected by underlying determinants, which include the assets, practices, and services available to children, adolescents, and women in their households, communities, and environments. The enabling determinants are the political, economic, societal, and environmental processes, structures, factors, and potentialities that enable good nutrition.

Figure 7: UNICEF Conceptual Framework on the Determinants of Maternal and Child Nutrition, 2020.



3.2 Impacts of malnutrition

Malnutrition imposes a staggering cost in both human and economic terms (the economic impact of malnutrition is discussed in more detail later). Malnutrition is the underlying cause of half of all deaths in children under the age of five globally. Equally, undernourished women are at greater risk of dying from pregnancy complications compared to well-nourished women and have a higher risk of delivering low-birthweight babies who in turn are at higher risk of physical and cognitive impairments and nutrition-related chronic diseases (Black et al., 2008). Undernutrition can lead to poor growth, infection, and death, as well as poor cognition, poor school-readiness, poor school performance, and poor earning potential later in life. Micronutrient deficiencies lead to poor growth and development, poor immunity and tissue development, poor health, and risk of death. In pregnant mothers, it could lead to maternal mortality, neural tube defects in new-borns, low birthweight, and impaired cognitive development. Being overweight leads to health issues such as cardiovascular diseases, diabetes, and other metabolic disorders, as well as infections and poor self-esteem. In pregnant mothers it could lead to gestational diabetes, obstetric complications, and chronic disease for the child later in life.



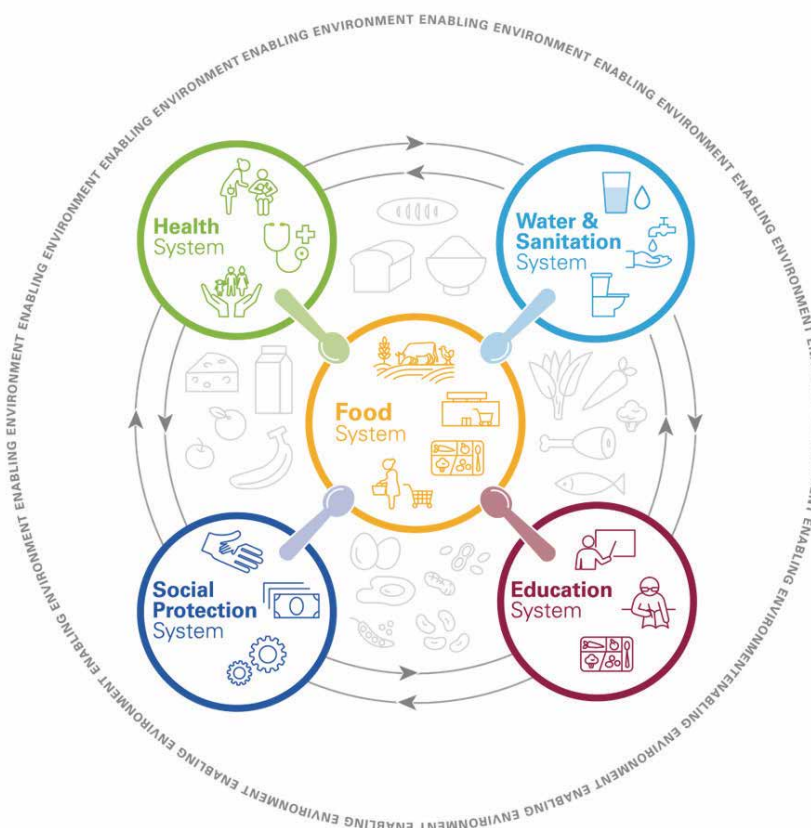
4. Policy solutions to malnutrition

4.1 Essential nutrition actions

A systems approach to maternal and child nutrition aims to make five key systems better equipped and more accountable for improving nutrition: food, health, education, social protection, and water and sanitation. Whereas a multisectoral approach focusing on “nutrition-sensitive sectors” is driven by the

hypothesis that achieving each sectoral objective will lead to better nutrition outcomes, a systems approach aims to activate systems with the potential to deliver nutrition-specific interventions at scale and leverage them to deliver nutrition results that go beyond their own sectoral objectives.

Figure 8: Systems approach to nutrition



Source: UNICEF (2019)

This course focuses on nutrition interventions in the health system, which predominantly comprise nutrition-specific interventions that address the underlying causes of malnutrition.

The WHO has defined a set of essential nutrition actions that are delivered through the health system across the life-course (WHO, 2019). Table 4 lists these essential nutrition actions and identifies the

component of primary healthcare or referral care through which they are delivered. A more detailed list of all the essential nutrition actions, and the contexts in which they apply, is provided in WHO (2019). You may see a selection, or a combination of the interventions, being referred to throughout the various modules of the course as different studies and countries focus on some or all of these interventions.

Table 4: Overview of essential nutrition actions delivered through the health system, by age group

Nutrition action	Infant	Child	Adolescent	Adult
Optimal timing of umbilical cord clamping	•			
Care of low-birthweight and very low-birthweight infants	•			
Assessment and management of wasting	•	•		
Protecting, promoting, and supporting breastfeeding	•			
Appropriate complementary feeding		•		
Growth monitoring and assessment		•		
Vitamin A supplementation		•		
Iodine supplementation		•		•
Zinc supplementation in the management of diarrhoea		•		
Iron-containing micronutrient supplementation		•	•	•
Nutritional care during pregnancy and postpartum				•

Adapted from WHO (2019)

Other sectors play a complementary role in supporting the essential nutrition actions. They may do this through multiple pathways, including ensuring the production and supply of nutritious foods (e.g., agriculture), the prevention of water- or food-borne diseases (e.g., water and sanitation), and by improving the knowledge and skills of children and caregivers (e.g., education). These nutrition-sensitive

interventions and programmes address underlying and enabling determinants of nutrition, largely through the health, food, social protection, education, and water and sanitation systems. Nutrition-sensitive programmes can serve as delivery platforms for nutrition-specific interventions (described below), potentially increasing their scale, coverage, and effectiveness (Ruel *et al.*, 2013).

4.2 Financing for nutrition

While the nutrition interventions discussed above are cost-effective,¹⁶ there are barriers and bottlenecks to the delivery, and utilisation of these interventions. As a result, the coverage of nutrition interventions delivered through the health system is low (i.e., is not universal) in several countries (Annex A presents coverage data for selected interventions). The availability of sufficient resources is one of the enabling determinants of good nutrition. However, analyses across countries globally, have indicated there is insufficient funding for nutrition interventions. To meet the WHA targets in 2025, the World Bank estimates that an additional investment of US \$70 billion over 10 years would be required across the world. However, given that resources are constrained, the report recommends investing in scaling up selected high-impact interventions, which would lower the additional investment required over 10 years to US \$23 billion (Shekar *et al.*, 2017).

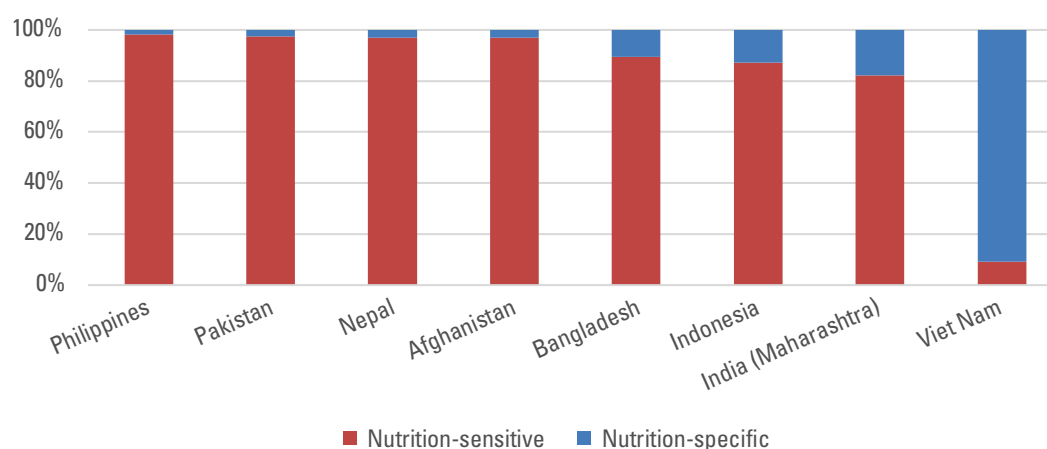
In several countries, including in Asia, nutrition interventions are financed through public funds as well as by multilateral and bilateral donors, UN agencies, private foundations, and civil society. An analysis of budget allocations to nutrition (within and outside the health system) show that expenditure on nutrition programmes contribute a negligible proportion of total government expenditure in some countries such as Viet Nam and Laos, and up to 9% in others such as Bangladesh and the Philippines (Development Initiatives, 2017). Budget analyses also

show that governments spend more on underlying determinants of nutrition or nutrition-sensitive spending than they do on the list of nutrition actions recommended by the WHO (see Figure 8). So, for example, only about 2% of the Philippines spending on nutrition is on services delivered through the health sector.

Caution should be taken when comparing total budgets and expenditure across countries as a variety of methods are used to estimate nutrition expenditure. The challenges of calculating the budget allocations and expenditures on nutrition interventions that are delivered through the health system should also be recognised as most often they are integrated within other health programmes (for example, iron and folic acid supplementation for pregnant women is part of ante-natal care) and this makes it difficult to separate them. We discuss this and other challenges in further detail in Module 5 on budget and expenditure tracking.

Countries also differ in terms of the extent of their total needs for nutrition. This depends on a number of factors such as the level of the malnutrition problem, the existing coverage of nutrition interventions, and the nature of the bottlenecks that prevent the scale-up of nutrition interventions in a particular context. However, malnutrition remains a huge public health concern in most Asian countries, and current resources available for nutrition generally fall short of meeting the estimated needs (Shekar *et al.*, 2017).

¹⁶ Cost-effectiveness refers to the return (e.g. number of lives saved or increase in income) on a programme or an investment for a given amount of cost incurred. Cost-effectiveness is discussed in more detail in Module 8.

Figure 9: Proportion of nutrition spending on nutrition-specific interventions

Source: Analysis based on SUN Investment Snapshots for most recent budget year available

4.3 The case for spending on nutrition interventions

Several studies have shown that the essential list of nutrition actions listed in Table 4 are highly effective in reducing maternal anaemia, likelihood of stunting, and infants born with low birthweight, leading to a reduction in morbidities such as diarrhoea and neonatal and infant mortality (WHO, 2019; Shekar et al., 2017). The case to invest in nutrition programmes is a strong one, not just in terms of a moral imperative (i.e., through lives saved or disabilities averted) but also in terms of building human capital and increasing economic growth. Studies have estimated that early nutrition programmes can lead to improved schooling completion rates and increased wages. In Asia and Africa, reduction in stunting can lead to potential increases in gross domestic product

(GDP) per capita by 4% to 11% (Shekar et al., 2017).

Table 5 (by region) and Table 6 (by country) show the return on investment in nutrition-specific programmes (most which are delivered through the health system). The cost–benefit ratio summarises the overall value of an intervention or a set of interventions as a ratio of the benefits, expressed in monetary terms, relative to its costs. If the benefit from an intervention is more than its cost (i.e., the cost–benefit ratio is more than 1), the intervention is considered a good investment; the higher the ratio is, the better the investment the intervention is. The estimations of cost–benefit ratios for nutrition-specific interventions show a very high return on every dollar invested in Asia.

Table 5: Returns on investment on scaling up key nutrition interventions, by region

Region	Pooled cost–benefit ratios of scaling up key nutrition-specific intervention to meet targets related to:			
	Stunting	Anaemia	Wasting	Breastfeeding
South Asia	15.1	14.0	2.1	37.0
East Asia and Pacific	15.8	10.9	2.6	33.8

Source: Shekar et al. (2017). Figures are based on selected countries with highest burden of undernutrition and/or high prevalence and 3% discount rate.

Table 6: Returns on investment on scaling up key nutrition interventions for selected high burden countries

Country	Cost–benefit ratio for investments to reduce stunting
South Asia	
Bangladesh	17.9
India	38.6
Nepal	12.9
Pakistan	28.9
East Asia	
Indonesia	47.7
Myanmar	17.2
Philippines	43.8
Vietnam	35.3

Source: Hoddinott et al. (2013) Discount rate of 5%.

Box 2 The cost–benefit ratio for wasting

The reader will be curious to understand why, in the World Bank’s estimations, the cost–benefit ratio for wasting is much lower than for other indicators of malnutrition. A few possible reasons for this include the following.

- The estimates are conservative as only mortality reductions are taken into account. While there may be additional child development benefits from treating wasting (such as improvements in cognitive ability), there is limited research on these issues, which means that the effect sizes of the impact are not yet quantified. Research also increasingly shows that being wasted increases the chances of being stunted later on in life, which further implies that the estimated cost–benefit ratio is likely to be understated (Wasting-Stunting Technical Interest Group, 2018).
- The cost of treatment of SAM is expensive, in part due to the high cost of treatment supplies. Further research is needed to find strategies to prevent wasting (rather than treating it) and to make treatment more cost-effective. Wasting or acute malnutrition can be classified as severe or moderate. The World Bank analysis includes only the treatment of severe acute malnutrition (SAM) and does not include the costs or impacts of treating moderate acute malnutrition (MAM) because the evidence base and WHO guidelines for the MAM treatment intervention are lacking.

Despite a lower cost–benefit ratio, there is a strong moral argument for investing in treatment for wasting: wasted children are 11 times more likely to die compared to health children, and 80% of children who receive the treatment are cured. However, coverage is low, with estimates showing that only 20% of wasted children having access to SAM treatment (nowastedlives.org)

17 Interventions are based on Bhutta et al. (2013)’s list of nutrition-specific interventions to reduce stunting.

4.4 Global initiatives and commitments in nutrition

Nutrition has been included in the SDGs and 193 countries have signed up to end malnutrition in all its forms by 2030 (SDG Target 2.2) and to achieve the WHA targets outlined in Chapter 1. Apart from SDG

2, improvements in nutrition outcomes can also help achieve many of the other SDG targets (as depicted in Figure 10).

Figure 10: Nutrition in the SDGs



Source: Sight and Life (2015) "Goodbye MDGs, Hello SDG." Volume. 29(2).

PF4C-N

The nutrition-specific interventions outlined above are proven to reduce the burden of malnutrition and associated maternal and child mortality. While they offer great potential, an important challenge is to scale them up to reach effective coverage of these key interventions and for governments to provide sufficient and sustainable financing to ensure this can take place.

Many of the challenges of scaling up nutrition can be traced to PFM issues and challenges. Some common PFM-related obstacles are highlighted in Box 3. Governments may see reduction of malnutrition as a priority, but they may lack adequate budget allocations and spending in delivery systems for nutrition programmes and services, e.g., the density of health workers may be too low or health workers providing nutritional advice to mothers may not

available due to delayed salary payments resulting from poor funding flows. Children with SAM may be unable to get the care they need because therapeutic nutrition supplies are lacking due to poor costing or inequitable distribution of funding. To ensure that high-impact nutrition interventions can be scaled up to reach universal coverage, there needs to exist adequate, effective, efficient, and equitable public financing for nutrition.

PF4C-N covers a wide range of financing and public finance management issues, including the need for robust finance data to inform decision making and advocate for better nutrition; costing studies to scale up nutrition; alignment of nutrition investments within well-coordinated country plans; the tracking of nutrition expenditure; and the identification of financing gaps and developing resource mobilisation strategies.

Box 3

Common PFM-related obstacles to achieving nutrition outcomes

1. *Low budget priority* due to a lack of awareness among financial decision makers around the economic case of investing in nutrition.
2. *Insufficient* budget allocation for implementing nutrition plans.
3. *Inefficient* expenditure due to delayed disbursements, leakages, and procurement issues.
4. *Ineffective* expenditure by funding high-cost, low-impact interventions, or fragmented spending where multi-sectoral interventions are required.
5. *Inequitable* allocations resulting in lower investment and poorer services for disadvantaged areas or populations.
6. *Weak financial accountability* compounded by limited budget transparency or citizen participation.

4.5 PF4C-N conceptual framework

Figure 11 shows the conceptual framework that has been developed for this learning programme. The modules of the learning programme cover the various elements of the PF4C-N conceptual framework, which are described one by one below.

Budget cycle

An important objective of PF4C-N is that budgetary allocations to essential nutrition interventions should be adequate; integrated into the policy, planning, and budget cycle; and supported by the relevant national stakeholders at central and decentralised levels. In addition to presenting the general budget cycle, it is important to have a better understanding of how the system design of each of the phases of the budget cycle can influence decisions for nutrition. Given PF4C-N spans the entire policy cycle (from planning through costing, budget allocation, and financing to actual implementation and evaluation), the learning programme centres around the budget cycle.

This budget cycle is a powerful tool for nutrition stakeholders to diagnose weaknesses across the transformation from policy over planning, costing, and budgeting formulation to budget implementation, the delivery of nutrition interventions by the health system and the uptake of these nutrition

interventions by the population the nutrition outcomes of which we expect to see improved. The cycle fits within the results framework for PF4C-N (depicted in Figure 11 by the outer circle, from Nutrition Policies and Strategies to Nutrition Outcomes), showing how policy attracts budget allocation that is converted into actual expenditure (inputs) and to programme outputs, which ultimately translate into child nutrition outcomes. **Module 2: Budget cycle entry points for nutrition** covers this part of the framework.

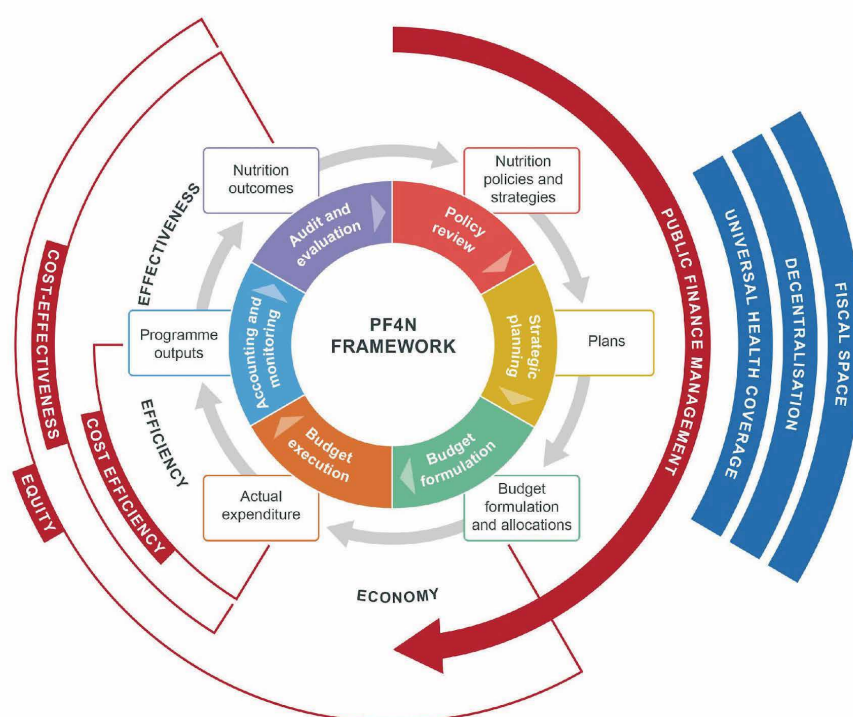
From policies to budgets

Module 3: Costing for nutrition and **Module 5: Budget and expenditure tracking for nutrition** deal with the first half of the budget cycle (from policies and plans to budgets), discussing the tools that can be used to cost a nutrition plan accurately, as well as tools to strategically analyse and track budget allocations and actual expenditure on nutrition. Developing a fully costed nutrition plan is necessary for planners to budget adequate government resources by identifying the resources required as well as the financial constraints to delivering a nutrition strategy. Budget and expenditure analyses are an input to the costing exercise. Additionally,

these analyses provide governments with timely information to improve the efficiency of budget allocations and spending. They also serve as mechanisms for accountability and transparency, as

they enable nutrition stakeholders to encourage the government to make greater commitments to nutrition and to evaluate the government's progress against their strategic goals.

Figure 11: PF4C-N conceptual framework



From budgets to outcomes

The second half of the budget cycle shows how budgets lead to outputs and outcomes. As discussed earlier, nutrition-specific interventions have received increased attention, not only because nutrition outcomes are poor in several contexts but also because these interventions are particularly cost-effective and have a high return on investment. This is a crucial building block that supports the advocacy for increased spending on nutrition and acknowledges that under-funding is a feature throughout Asia. However, increasing resources will have little effect if the increased funds are not spent in an efficient and effective manner. **Module 3: Costing for nutrition** and **Module 8: Investment cases and value for money in nutrition** cover this part of the framework in more detail. Finally, it is essential that there is equity in financing of nutrition programme and in access to nutrition services such that resulting

outcomes are equitable across the population. This concept is covered in **Module 9: Equity in nutrition**, which also describes the analytical tools available to measure equity.

Fiscal and policy environment

The budget cycle and PF4C-N in general are affected by a country's public finance management processes, its fiscal architecture, and its policy towards financing key sectors delivering nutrition interventions (such as the health sector, or in the case of some countries the women and child development sectors). This includes the question of whether fiscal space is available to the government, as this determines whether more resources will be dedicated to nutrition programmes. Another question is how decentralised a government is, as PF4C-N expresses itself differently in a context with high levels of

decentralisation: a large part of the planning and execution is done at the sub-national level. These issues will be studied in Module 4: Fiscal space for nutrition and Module 6: Decentralisation and nutrition. Given the shift towards Universal Health Coverage (UHC) as the health financing paradigm in

several Asian countries, and given that most nutrition interventions are closely connected to the health system, the state of UHC in a country will influence PF4C-N. The learning programme covers this in Module 7: UHC, health insurance, and nutrition.

4.6 PF4C-N within nutrition financing and service delivery context

The PF4C-N conceptual framework is the key approach to improving the performance of nutrition expenditure as it helps to systematically assess the various entry points into the policy and budget cycle

that might offer opportunities for improvement. However, the conceptual framework needs to be considered within the nutrition financing and service delivery country context.

4.6.1 Coverage of nutrition interventions within the health system

The list of essential nutrition interventions is delivered through primary healthcare systems. This implies that progress towards nutrition targets is partly conditioned by the performance of the primary healthcare system. One important dimension is the coverage of health services, i.e., the extent to which

they are available to the population (Heidkamp et al., 2020). Figure 12 shows, first, the coverage of the health services through which nutrition interventions are typically delivered, and, second, the extent to which nutrition services are effectively offered as part of those health services

Figure 12: Health versus nutrition services coverage for selected nutrition interventions by country income group

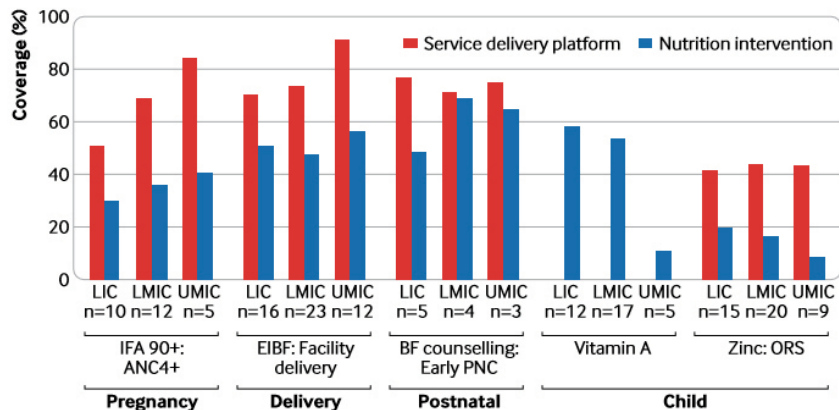


Fig 1 | Pooled estimates of coverage of nutrition interventions and their respective health service delivery platforms by World Bank income group among countries with nationally representative Demographic and Health or Multiple Indicator Cluster household surveys between 2013 and 2018. ANC=antenatal care; BF=breastfeeding; EIBF=early initiation of breastfeeding; IFA=iron folic acid; LIC=low income countries, LMIC=lower middle income countries; n=number of countries contributing to the pooled estimate; ORS=oral rehydration solution; PNC=postnatal care; UMIC=upper middle income countries

Source: Heidkamp et al. (2020)

Some important observations stand out. First, the coverage of primary health services is far from comprehensive. Pregnancy-related services, for example, have a coverage of about 50% in low-income countries (the first bar chart of the graph), going up to above 80% in upper-middle-income countries. Important nutrition-specific services such as counselling about diets and infant and young child feeding and the monitoring of weight gain and the provision of iron folic acid are all offered as part of pregnancy-related health services. If the pregnancy-related health services are not available to the population, then the nutrition-specific services that are delivered through them will not be either. The first challenge, then, is often to ensure that primary healthcare services are offered to the entire population.

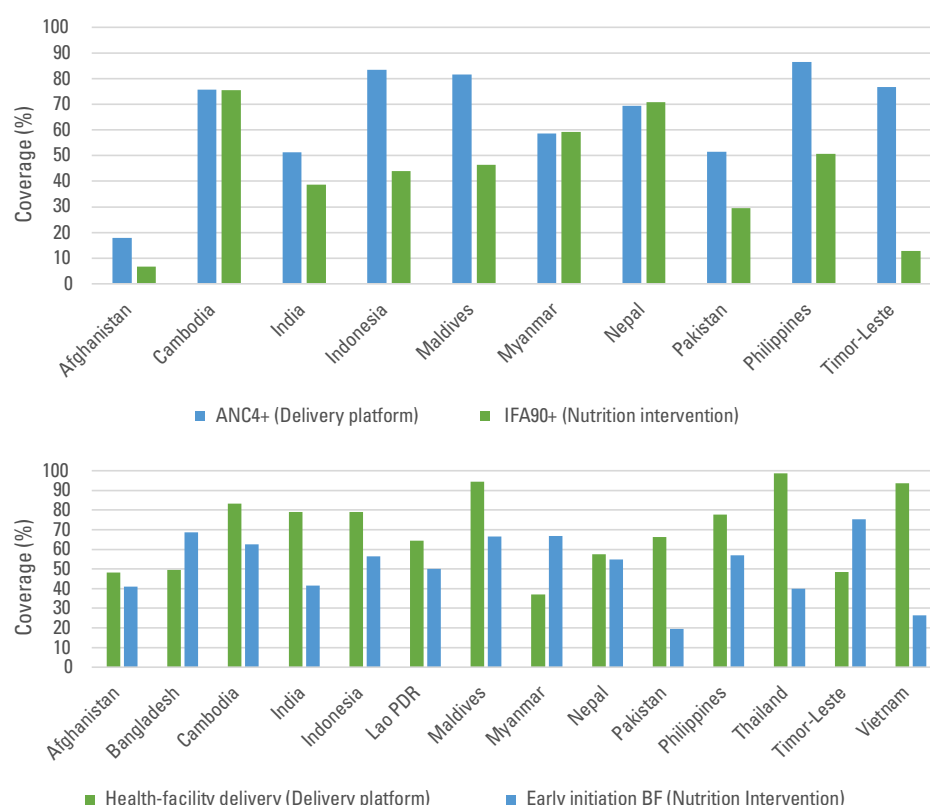
Second, just because primary health services are available does not mean the related nutrition interventions will automatically be available as well. The graph shows that, while pregnancy health services are available in roughly 50% of low-income

countries, ante-natal care and iron folic acid provision are only available in about 30% of low-income countries. This highlights the second challenge: to ensure that nutrition interventions are effectively supplied as part of the primary healthcare package.

The extent to which nutrition interventions as part of essential health services are actually available to the population is an important first question of any PF4C-N work. The second question that should be asked is: 'If they are available, are they accessible?' This question is equally important in light of the significance of financial barriers to accessing healthcare in some countries in the region. This is addressed in more detail in Module 7 on UHC.

This picture can be refined for individual countries in South Asia and East Asia, and essentially the same message as described earlier emerges. We see from Figure 13 that (with some exceptions) the coverage of primary health services such as ante-natal care and health facility delivery is greater than the nutrition services that are linked to them.

Figure 13: Coverage of nutrition services and the platform typically used for delivery



Source: Demographic Health Surveys (DHS) and Multiple Indicators Survey (MICS), latest available data from 2010 onwards.

4.7 On-off budget of nutrition expenditure

A second assessment to make is whether nutrition interventions are on- or off-budget. The PF4C-N conceptual framework assumes nutrition expenditures are on-budget, but external donors and non-governmental organisations (NGOs) might run nutrition programmes; the expenditure would then often not be included in the government budget. In some cases, the expenditure might not even be part of the national nutrition plan. This situation is shown in Figure 14, which is explained below.

The first column on the far left of the graph provides the different activities associated with each of the components of the budget cycle, shown in the last column on the far right of the graph. The middle of the graph is divided according to which actor manages the nutrition programme: either this is the 'NGO or donor programme' or it is the 'Government' through its ministerial departments at central and sub-national level.

The second row, which shows the planning function ('Plan'), illustrates whether nutrition interventions are 'on-' or 'off-plan'. When NGO or donor programmes engage in nutrition activities that are not evidence-based, they are mostly 'off-plan'. This is increasingly rare, and therefore many nutrition activities are 'on-plan' and insert themselves into the national multisectoral nutrition plan. The government's activities are in principle always 'on-plan'.

The budgeting for nutrition programmes is often complex, for two reasons. NGO and donor nutrition budgets are most often not incorporated into the national budget (they are 'off-budget'). However, while government nutrition expenditure is 'on-budget', it is most often part of a primary healthcare programme and therefore not easy to identify individually. This has knock-on effects for the 'Service Delivery' or 'Budget Execution' phase of the budget cycle, as nutrition expenditures are often difficult to track using routine budget data.

Lastly, nutrition programme outputs (such as the number of Vitamin A doses administered) may or may not be monitored, reported, and analysed. Some NGO or donor programmes might not record or report this data back to the nutrition programme coordinating body. Others might, in which case the nutrition coordination body would be able to monitor and report outputs more accurately. On the government side, however, monitoring and reporting is likely to happen on a routine basis as part of the Health Monitoring and Information System, but as nutrition activities are part of primary healthcare (as discussed earlier), nutrition programme outputs are often not reported on an individually identifiable basis.

The extent to which nutrition activities, budgets, expenditure, and outputs are on- or off-plan, budget and reporting system is country specific but always adds considerable complexity to improving the performance of all nutrition expenditure. This needs to be duly recognised in any PF4C-N activity.

Figure 14: Nutrition programme expenditure off- and on-budget, by budget cycle component

Activity	Non-Government: NGO, Donor programme		Government	Budget cycle
Plan	Off Non-evidence based activities	On Activities are evidence based as part of plan	On Activities are evidence based as part of plan	Strategic planning Cost estimation Prioritisation
Budget	Off Not part of budget formulation	Off Not part of budget formulation	On Often non-identifiable as part of health programme	Budget Formulation
Service delivery	Off Not part of budget execution	Off Not part of budget execution	On Health programme budget execution	Budget execution
Expenditure tracking	Off Actual expenditure not reported	On Nutrition expenditure reported as part of MSNP coordination	On Nutrition expenditure reported as part of budget execution	Accounting and monitoring Audit and monitoring
Output monitoring	Off Output and analysis not reported back to MSNP	On Nutrition programme outputs reported back to MSNP	On Health programme outputs and analysis available	Policy Review

5. Concluding remarks

Malnutrition is a public health concern across Asia. The implications of malnutrition, however, are not only restricted to the health of the population but also impact cognition levels, future productivity and economic growth. The case to invest in nutrition, as has been outlined in this module, is a strong one. This is particularly true for a set of nutrition services that are delivered through the health system, which have proven to reduce the burden of malnutrition and have found to be cost-effective. Despite offering great potential, governments have struggled to scale up these interventions to reach effective coverage and to provide sufficient and sustainable financing for this to take place.

PFM issues and challenges are contributory factors to why scale up has not taken place. The PF4C-N framework, which this module introduces, provides a systematic way to assess these issues and challenges and to identify entry points into the policy and budget cycle. The remaining modules cover different components of the framework in detail. The module also discusses the need to understand the specific institutional and service delivery context of a country when designing effective PF4C-N solutions for improving coverage of nutrition services. This includes assessing the type of fiscal architecture in place, whether there is universal health coverage, and understanding the extent to which nutrition expenditures take place on-plan, budget and reporting system



MODULE 2

Budget Cycle Entry Points for Nutrition



Overview of the module

The budget cycle is a foundational concept of Public Finance for Children - Nutrition (PF4C-N). It is a powerful tool for nutrition stakeholders to diagnose weaknesses across the transformation from policy development through planning and budgeting to budget implementation, the uptake and coverage of nutrition services, and the improvement of population

nutrition outcomes. In this session we explore the different entry points in the budget cycle.

The emphasis of our approach will be on the way in which the components are linked (or not) and on how to assess bottlenecks at each level of the transformation chain.

A. Why is this module important?

Budgets are a key instrument for the realisation of identified priorities and the medium through which policies are funded, executed, and delivered. A budget is arguably one of the single most important public documents (fulfilling economic, political, legal, and managerial functions) as it translates a country's national development goals into annual spending plans. No matter how good a policy is, unless it is taken up in the national budget, public financial resources will not be leveraged to make a difference in nutrition outcomes.

The COVID-19 global pandemic has led to an economic growth crisis, which has had important knock-on effects on the available fiscal space for governments. This means that in the short and medium term, many governments have less public expenditure to allocate across programmes. Therefore, it is likely that there will be more intense competition for public resources and greater

emphasis will be placed on the optimal use of available resources. The budget cycle is the most important instrument to ensure that both enough money is allocated to nutrition programmes, within the constraints of available fiscal space, and that that money is spent with maximum impact.

This module relates to the Public Financial Management (PFM) systems and budget cycle from the conceptual framework shown in Module 1 'Situating the Learning Programme' and describes the process of converting fiscal space (discussed in Module 4) to nutrition expenditure. This is the mechanism by which policies for nutrition appear in sector plans, which manifest themselves in budget allocations and ultimately in actual expenditure. The first part of the budget cycle looks at this process from policy up to budget allocation. The second part looks at budget execution, monitoring, and using results to better formulate and revise policy.

B. Why does this matter for governments?

In this module, you will learn the workings of the budget cycle. Your ability to influence nutrition budgets hinges on knowing when and how decisions on expenditure allocations are made at all governmental levels and how these translate into what is happening on the ground, with the associated impact on nutrition outcomes.

C. Learning objectives

The objective of this module is to familiarise participants with the budget cycle and to provide a framework for a more detailed review of the budget cycle stages and relevant PFM tools that can be used to inform and influence the budget process.

By the end of this module, you will be able to:

- Relate how public finance affects health and nutrition service delivery;
- Recognise how the desired features and constraints of a PFM system can have implications for equitable access to resources and services for nutrition;
- Explain the budget cycle in your country and identify its main stakeholders; and
- Identify entry points and key levers for nutrition stakeholders to engage with the budgetary process.

D. What does this module cover?

In this module we will first review the basic objectives of a PFM system and budget, as well as the key principles that enable them to fulfil their functions. We will then learn about the budget cycle, its key stages for nutrition programming, the main players involved in each stage, and about some of the tools and mechanisms that exist to inform and influence the process.

E. Reading materials

Core reading

- Batini, N., Lomax, L., & Mehra, D., (2020). Why sustainable food systems are needed in a post-COVID world, available at: https://blogs.imf.org/2020/07/14/why-sustainable-food-systems-are-needed-in-a-post-covid-world/?utm_medium=email&utm_source=govdelivery
- D'Alimonte, M. (2020). How the pandemic is affecting funding for nutrition. Available at: <https://r4d.org/blog/how-the-pandemic-is-affecting-funding-for-nutrition/>
- Sida (2007) 'Introduction to PFM in Development Cooperation', Chapter 1 in Handbook on Public Financial Management in Development Cooperation: A Handbook for Sida Staff, Department for Policy and Methodology, April, available at: www.sida.se/contentassets/caf5be28d6a740b8b43256a040402dcc/public-finance-management-in-development-co-operation_1394.pdf. Read Chapter 1 of the Sida Handbook on PFM, **pp. 9–16**. This chapter provides a brief introduction to PFM for non-PFM practitioners, including an overview of the budget cycle. (8 pages)
- Singh, C., Shrivastava, S., Singh, G., & Acharya, N. (2019). Delivering Nutrition to Pregnant Women. Economic & Political Weekly, 54(20), 31, available at: <http://www.cbgaIndia.org/wp-content/uploads/2019/05/EPW-Piece-May-19-2019.pdf> Provides an example from a district in India of how gaps in the planning and budgeting process leads to poor delivery of nutrition services.

Suggestions for further reading are given at the end of the module.

About PF4C-N

PFM refers to the processes by which public resources are planned and managed. It includes the management of revenue and expenditure. A PFM system that performs well is one in which public resources are used efficiently and effectively in line with policy objectives and that improves the equitable distributions of resources and outcomes.

PF4C-N refers to efforts throughout the PFM cycle to

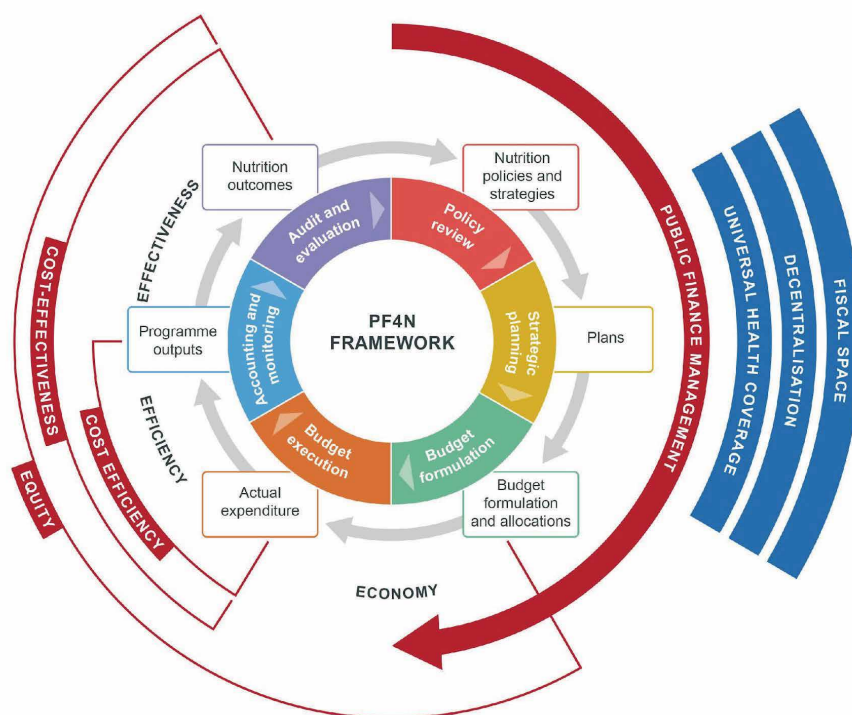
identify steps that need to be taken to translate political commitments into measurable nutrition impact. To build these connections, actions can be taken at all stages of the PFM cycle to better ensure improved nutrition results. This course focuses on financing for nutrition within the health sector and ensuring links between nutrition plans and health budgets, while recognising that many countries have developed multisectoral nutrition plans.

1. Budget management in the PFM framework

As can be seen in Figure 15, the ideal budget process translates nutrition-centred policies into sector plans and allocates funds to the appropriate authorities. Monitoring and analysis of expenditures follow along with measurement of outputs and impacts. The

results inform the next budget cycle. Engagement and coordination are important throughout the process, but are especially important in defining and growing the fiscal space available for nutrition programming.

Figure 15: Nutrition in the PFM framework



While this is the ideal process, the reality is usually quite different and many connections that make up the strength of the budget cycle are, when it comes to nutrition, often severely challenged.

- Funding for nutrition plans – both the multisectoral and the health sector components – are often funded by off-budget donors, in whole or in part. While their financial contributions might be in line with the plan and may be recorded, the funds do not flow through the budget.
- When financial resources for nutrition come from different sources, this often leads to fragmented service delivery, resulting in duplication in some places while leaving gaps in others.
- Fragmented funding sources also lead to challenges in monitoring expenditure flows as well as evaluating their performance against common benchmarks, thus breaking the feedback loop to the next planning cycle.
- Funds for nutrition activities are often subsumed into health programmes and not separately identifiable. For example, counselling for exclusive breastfeeding or iron and folic acid (IFA) supplementation often

occurs during ante-natal and post-natal care sessions and can rarely be identified individually in the budget. These activities are likely to be part of the maternal and child health budgets (e.g., part of primary healthcare at the district level) without providing the detail of the activities in those budgets. As such, budgets for exclusive breastfeeding or IFA supplementation cannot easily be tracked using routine budget information.

- The fact that funds for nutrition interventions often do not have standalone programmes associated with them but are more often integrated into larger health programmes is a problem for accountability that is carried through most components of the budget cycle. From budget formulation throughout the budget cycle, integration of resources causes us to lose track of amounts budgeted for and spent on nutrition activities.

Identifying solutions to these broken linkages is part of the objective of analysing the budget cycle for nutrition. Not surprisingly, there are many opportunities to improve the process and for stakeholders to advocate for and advance nutrition programming.

1.1 The importance of budgets to drive results

Assume that a government's stated policy goal is to eliminate undernutrition in the next 15 years. One proposed intervention is to educate pregnant women and other caregivers about optimal infant feeding and care practices (breastfeeding and complementary feeding) according to the World Health Organization (WHO)'s recommendations. For this to occur, health providers and other family counsellors will need to be trained in the recommendations while allocating sufficient time to provide counselling support to caregivers.

The Ministry of Health will provide funding to institutions "municipality or local government" for local health programmes and the Ministry of Health will need funds to conduct training. However, for the ministry to receive these funds, the amount required to fund the new programs would have to be allocated in the national budget for it to be legally appropriate for the infant feeding education programme, while

ensuring the necessary resources are available to contribute to the government's announced goal.

A country's national budget is, therefore, at the centre of PFM. It translates a country's national development goals into annual spending plans and defines the fiscal space available for programming. The development, implementation, and reporting mechanisms of the budget all require technical understanding of the PFM process. In addition, as budget outcomes can depend on political factors as much as on economic factors, it is also important to understand the politics of the budget process. Knowledge of the workings of the budget and of the broader PFM system in a country helps in understanding why resources are spent on certain things and in certain ways; it also provides the ability to find mechanisms to influence the process and decisions that lead to appropriate spending.

It is also important to consider the budget within the broader national nutrition context and government goals. This includes understanding the links and gaps between the severity and magnitude of the malnutrition problem, the formulation of policy, the design and development of a programme, the allocation of resources, budget execution, and service delivery on the ground. Considering the threat caused by COVID-19 to global food security, the economy, and individual incomes, many have

been left vulnerable and unable to afford the recommended nutrition mix. Henceforth, budget allocation within the national nutrition context is vital in a post COVID-19 world.¹⁸ If these links and gaps are understood, opportunities can be found to improve the design of policies and programmes, their inclusion in the budget process, and their implementation on the ground, so as to achieve a better impact on nutrition outcomes.

1.2 The budget cycle

The budget process can be broken down into several stages. There is no standard budget cycle internationally and each country determines its own budget cycle. However, they all follow more or less the same stages. For the purpose of this course, we use a six-stage budget cycle to provide a framework

to explain a country's budget process. It is based on the Handbook of Public Expenditure Management (World Bank, 1998: 32). Figure 16 illustrates the budget cycle. Each of the six stages is explained further below.

Figure 16: The budget cycle



Source: Adapted from World Bank (1998)

1.2.1 Policy review

The budget process starts with a review of existing policies, updating these policies and programmes, and developing new policies and programmes where necessary.

At this stage, each sector should review the results of their public spending relative to their stated policy goals. For example, the government might have dedicated resources to an information campaign on infant and young child feeding, as well as a support

¹⁸ David Laborde et al. (2021). 'Impact of COVID-19 on global poverty, food security and diet: insights from global model scenario analysis', *Agricultural Economics*, 52:3, 375-390. Available at: <https://onlinelibrary.wiley.com/doi/10.1111/agec.12624>.

programme by skilled health workers directed at mothers to increase the percentage of children being exclusively breastfed during the first six months of life. This would be expected to improve nutrition outcomes. A policy review assesses how far the information campaign and support programme have been effective in increasing the percentage of children exclusively breastfed for their first six months and what effects this has had on nutrition outcomes. This will inform the updating of existing policies and plans. Tools used at this stage are public expenditure reviews (PERs), annual reports to parliament, impact evaluations, reviews of programme delivery, and situation analyses. Policy updates will also consider the latest evidence, WHO recommendations, and shifting contextual factors.

For these tools to be most useful for promoting nutrition, the information must be disaggregated sufficiently to highlight nutrition interventions, their costs, and their impacts. Nutrition stakeholders can advocate, for example, to include nutrition as a key indicator in health sector reports and analyses.

1.2.2 Strategic planning

The strategic planning stage occurs when the Ministry of Health defines its goals and objectives in line with national policy priorities, incorporates results from the policy review stage, and sets out how it intends to achieve these goals and objectives. This is a key stage for linking policies and budget when the ministry sets out a plan of action and service delivery objectives for a three- to five-year period. It will often be the case that there are medium- or long-term sector strategies that are developed or updated regularly in a Health Sector Plan. There may also be national or regional Nutrition Action Plans, which may cross multiple sectors.

COVID-19 has impacted nutrition outcomes through different channels including policy responses, food export bans, and fiscal stimulus. Around 22 countries had announced or imposed food export restrictions early in the crisis, affecting around 5% of calories embedded in traded food; however, all but one of these had been eliminated by the end of September 2020. Moreover, decline in incomes and supply disruptions have caused a behavioural shift in demand away from nutrition-dense foods, such as fruits, vegetables, and meats, towards staple food, such as

In reviewing policy, it is important to assess the equity of policies. For example, where expenditure is broken down by population group or by region, it might be possible to carry out an analysis of the extent to which resources are distributed equitably. The evidence on nutrition outcomes should be taken into account at the policy review stage; it should be assessed whether the policies are aligned with the most pressing needs of the targeted population.

Civil society organisations (CSOs), public finance management institutes, and research institutions can have an important role at this stage. They can provide evidence on policy outcomes or give a voice to the beneficiaries of these policies. It is important to involve such organisations at this stage and for them to provide inputs to government.

This stage is important to ensure that information is available and accessible throughout the budget cycle. Any element that is not recognised during the policy review stage is unlikely to attract funding at further stages of the budget cycle.

rice and other grains. Henceforth, the MOH needs to incorporate detailed strategic plans in nutrition to mitigate and recover from the effects of the COVID-19 pandemic. Equity should feature in these plans, with the targeted beneficiaries of these policies clearly defined. For example, many countries have 'norms' or budget allocation formulas that estimate the amount allocated to a certain target group based on need. If the national sector plan states that orphans and vulnerable children cannot be charged for micronutrient powders, for example, there might be a budget allocation formula to calculate the health facility grants based on the number of orphans and vulnerable children in the area of the distribution facility.

A variety of established sector stakeholder groups might have an interest in the strategic planning phase. These may include both government and development partner representatives. At the strategic planning stage, the health ministry will, of course, play the leading role, as they will be the stakeholder mandated to carry out the plans and are the most knowledgeable about the sector. The Ministry of Finance and the Ministry of Planning (or their

equivalents) should also be active to ensure alignment with the high-level national development goals and, where applicable, consistency and coherence across sectors. In countries where a National Nutrition Committee or similar structure exists, it should be involved or leading any cross-sectoral efforts.

Where planning is more decentralised, relevant local planning authorities should also be involved in identifying needs and in selecting appropriate strategies to address those needs aligned with the national strategy. In fully decentralised systems, it is especially important to educate local authorities on the importance of prioritising nutrition so they are empowered to make informed planning decisions. The national government can also provide training to practitioners and promote nutrition champions to advocate at the local level. Strategic planning around funding mechanisms is also a key component of incentivising desired programming.

During this stage, the involvement of the Ministry of Finance (and Ministry of Planning) provides opportunities for the engagement and education of decision makers. This can be helpful to nutrition stakeholders to ensure they understand the process, but will also educate decision makers regarding the importance of nutrition in advance of the budget planning.

In the sector strategy, the Ministry of Health should define:

- the sector or ministry's mission and mandate;
- a set of desired nutrition policy goals, with outcomes and objectives;
- the evidence-based theory of change underpinning achievement of these policy goals;
- descriptions of specific initiatives (i.e., programmes and projects) to achieve these goals;
- a timeline for achieving these goals; and
- cost estimates for implementing the specific initiatives.

When developing the sector plan, the ministry or stakeholder group should consider capacity constraints regarding implementation due to staff and skills shortages (human resources constraints) or lack of available funds (financial constraints). When coordinating interventions with other sectors, these constraints also need to be considered across sectors. The approach should prioritise the specific initiatives to identify where capacity building is required prior to implementation of other initiatives and to acknowledge where financial constraints may require a delay in the full execution of the approach. A phased approach should be developed to show the timeline to fully implement all activities in the plan.

Once the plan has been fully developed to address the needs and constraints and a timeline has been established to understand when activities should be implemented to achieve the stated goals, the plan needs to be fully costed. This is to ensure understanding of the following factors (and should include consideration of the COVID-19 pandemic, including the economic and development challenges faced, as well as the effects it might have on planned costs):

- The full cost of implementing the plan across years;
- The cost of activities currently in the budget;
- The cost of new activities that need to be included in the budget;
- The activities (and the cost of activities) implemented by non-governmental partners; and
- The new activities (and the cost of new activities) expected to be implemented by non-governmental partners.

This full costing allows planners to budget for necessary government resources and to ensure partners are working in sync with the government to reach the goals of the plan. More detail on fully costing a strategic plan is included in Module 3.

In some countries, the sector and cross-sectoral strategies might be updated annually as the budget is formulated, as we will see in the next step.

1.2.3 Budget formulation and approval

When countries make revenue forecasts for the coming fiscal year, they have an idea of the total fiscal space available to government. Ministries of Finance then set expenditure ceilings for ministerial departments, which in turn fit their budgets into the available envelope, taking into account their goals and objectives as agreed in the previous phase. Once the budget is formulated, it is finalised following executive (i.e., cabinet) and legislative (i.e., parliamentary) approval.

The first step in this process is for the Ministry of Finance, in consultation with the cabinet and the president or prime minister, to calculate the overall resource availability and define the aggregate expenditure ceiling (i.e., the total amount of resources available) for the entire government budget. In some countries the revenue and expenditure projections and the line ministries' ceilings might go beyond the next fiscal year and may contain estimates for a three- or five-year horizon, but will also include estimates for the upcoming fiscal year.

Some countries prepare a separate policy document prior to formulating the budget. This document presents the macroeconomic targets and projections. This might include the forecast for Gross Domestic Product (GDP) growth, inflation, and the exchange rate, as well as the fiscal and revenue targets, such as how much the government estimates will be collected through taxes and through other sources of funds. COVID-19 has worsened the macro-economic outlook in many countries, and projections have been reviewed downward. This document can present the total funds available for expenditure and an indication of the major expenditure categories (e.g., the amount required for servicing the debt and expenditure ceilings for each ministry). This will typically cover a three- or five-year period and will be updated annually. This document is often called the budget strategy paper (e.g., in Pakistan) or the fiscal strategy paper (e.g., in Afghanistan). Other countries might provide this information in the instructions sent to line ministries regarding preparing the budget. Once the high-level estimates have been calculated, the Ministry of Finance prepares and distributes budget guidelines (often known as the budget circular)

containing instructions on how to prepare the annual budget.

The level of decentralisation in the country affects the next steps. In more centralised governments, once line ministries receive guidance, they prepare and submit draft estimates to the Ministry of Finance within the aggregate expenditure ceiling given. In more decentralised countries, the line ministries then allocate budget ceilings to local governments, or the Ministry of Finance may provide local ceilings directly.

The individual line ministries (central, regional, or local depending on the country system) are responsible for formulating their own budgets and making decisions regarding resource allocation within their ministries, while adhering to the overall ceiling stipulated by the Ministry of Finance. It is almost always the case that line ministries feel they require more resources than they are allocated. Line ministries themselves must prioritise across their own programmes so as to remain within the given ceiling.

While in theory line ministries have a lot of autonomy to allocate their budgets across programmes, in practice the Ministry of Finance will often be closely involved in the process and its default position is to expect an allocation that looks similar to previous years, unless good reasons for deviation are provided. If, for example, the share of nutrition within the health budget increases significantly at the expense of allocations for other health programmes, the Ministry of Finance will expect a reasonable justification.

Following submission of the draft budget, line ministries at relevant government levels and the Ministry of Finance (and sometimes the Ministry of Planning) will hold bilateral discussions about the budgets that have been submitted to the Ministry of Finance.

The ability of line ministries to increase their budget allocations in this process will depend on the relative power of the Ministry of Finance and the different line ministries. However, sectors can do some things to increase their chances of receiving a higher budget. While line ministries have traditionally fought for more money based on their needs (e.g., health

facilities need more micronutrient supplements), Ministries of Finance need to hear that the money is being spent ‘well’—that is, that the line ministries have the capacity to spend efficiently and that additional resources will improve outcomes. Line ministries need to make their case and ‘sell’ the story to the Ministry of Finance; this story should focus not only on why additional funds are required, but also on how the funds will be spent and what the country will get in return for the expenditure. Investment cases (discussed in more detail in Module 8) are key to telling this story. Post-COVID, with less resources available, this ‘challenge function’ will become even more vigorous.

In the case of nutrition, the ability of the Ministry of Health to sell its story depends critically on the evidence provided by the departments when allocating funding within the ministry. This provides both a challenge and an opportunity for nutrition stakeholders to advance nutrition within the health sector. A well-developed costed plan with evidence-based interventions that achieve national goals is a good advocacy tool. Cooperative agreements with development partners to incorporate nutrition interventions into the Ministry of Health can provide opportunities for cost sharing as well as for government ownership of programmes. A strong argument for fiscal space for nutrition within the Ministry of Health also provides support when the Ministry of Health makes its case to the Ministry of Finance.

After budget negotiations between the Ministry of Finance and line ministries, individual budgets are then finalised and consolidated into the budget law or

budget appropriation bill, which is then submitted to parliament for open hearings. If parliament agrees, it is adopted.

The role of parliament in the budget formulation and approval stage will differ from country to country. In some countries, this role might be very limited. For example, in Bhutan there tends to be a strong executive branch and weaker judicial and legislative branches and parliament plays a limited role in the budget process. In other countries, parliaments can be relatively strong and have often introduced significant amendments to the budget proposal submitted by the executive, for example, in the Philippines.

Budgets are often input-based, providing little or no information on the intended results of the spending plans. They are focused on expenditure control rather than on results. Reforms relating to budgets have included the move towards results-oriented budgeting, organising budgets by programmes instead of by inputs or administrative department. This is called programme-based budgeting. In many countries, however, these types of reforms are in early stages of implementation.

From this stage onwards we often lose sight of precisely how much is set aside for nutrition interventions as these are often subsumed within larger child and maternal health packages. When this is the case, it will be important to track the documentation supporting the budget submissions for the larger child and maternal health packages to ensure that the relevant nutrition activities are clearly mentioned and taken into account in the budget request.

1.2.4 Budget execution

Budget execution is the stage when the planned activities are implemented through a gradual release of the budget. During this stage, revenues are collected, funds are released to the line ministries, personnel are deployed (if necessary), and activities are undertaken. The process is initiated when the Ministry of Finance releases a first tranche of funds to line ministries or local authorities in line with the budget approved by parliament. Line ministries then allocate funds to spending units (e.g., district health

authorities or regional or district hospitals). These spending units (or cost centres) can then initiate spending, procure goods and services, and start implementing nutrition services according to the activities in the plan and as financed in the budget. Payments are then made for those goods and services and the transactions are recorded in the accounting system.

Box 4 The budget process in the Philippines

The Philippines has a unitary system of government with over 1,700 Local Government Units (LGUs) that are responsible for functions such as local development and planning and delivering health and nutrition services. The budget planning process is carried out at the national and sub-national levels over the fiscal year which last from January to December.

Policy review: Targets for the broader health sector are set keeping in mind the Sustainable Development Goals, Universal Health Coverage and the goals for the Health Sector Reform Agenda in addition to the local government's plans and targets. For nutrition, the National Plan of Action for Nutrition is considered.

Strategic planning: Health sector planning is done in line with targets set in the National Objectives for Health, the health sector's medium-term plan.

At the local level, a Local Investment Plan for health is developed which translates national health goals into actions at the local levels. This is translated into an annual operational plan with projects and activities to be conducted and the budgetary requirements for them. However, studies have found that local health planning and budgeting process tends to be compliance oriented rather than needs- and evidence-based.

Consultations with regional and local committees are also held and citizens groups are engaged as the budget preparation process starts.

Budget formulation: Budget preparation starts in January – 12 months before the budget is approved - through the issuance of a budget circular by the Department for Budget Management (DBM) which contains the budget parameters, policy guidelines and procedures to aid line ministries. The budget call also stipulates the Internal Resource Allotment for local governments.

Different sections of health, including nutrition programmes, prepare budget proposals which are validated by the Program Planning Budget Deliberation Committee.

The Philippines follows up a bottom-up budgeting process and a 'two tier budgeting' approach. In March, the health department submits a 'Tier 1 proposal' to the DBM that contains expenditures for on-going programmes. This is followed by a 'Tier 2 proposal' submitted in May that contains proposal for spending on new projects and initiatives. Local governments submit their budgets in July.

By July the national budget is presented to the President and the Cabinet for finalisation in August. But before those negotiations take place between the health department and DBM. From August to December, the two bodies of the parliament – the House and the Senate hold budget deliberations. The budget is ratified and signed into law in December.

Budget execution: Before budget execution starts, the health department is expected to submit a Budget Execution Document which outlines its financial plans and performance targets for the fiscal year. It is on the basis of this that cash releases are made by the DBM.

Before the budget is passed, the health department also prepares its Annual Procurement Plans.

Throughout the fiscal year, budget is allotted. The health department and local governments carry out project implementation incurring liabilities that the government will pay including salaries and payments to suppliers of goods and services. The Treasury then disburses money to settle these liabilities.

The in-year management of the budget is crucial to ensure budgets are implemented as planned. In this process, it is often the case that Ministries of Finance release monies late or not at all due to treasury constraints (i.e., the government has not collected enough cash to distribute funds to line ministries as planned in the budget). This means that line ministries do not have the monies to implement their budgets, which will of course have consequences for service delivery. For example, the Ministry of Health may have planned to construct new health centres during the dry season; however, as money has not been released from the Ministry of Finance, the Ministry of Health may need to delay construction

work by a number of months, with the attendant risk of construction continuing into the rainy season. This might result, in turn, both in increasing construction costs and in not being able to construct the health centres until the next fiscal year. Construction delays result in an inability to offer promised services, which results in poorer overall health outcomes.

For many nutrition activities, it is not possible to use routine budget information to track expenditure as such activities are integrated into larger child and maternal health programmes (for which expenditure data will be available). If it is important to understand precisely how much has been spent on nutrition and whether this occurred according to plan, it will be necessary to carry out a PER. The PER must include sufficient detail to unpack the expenditure categories that contain nutrition interventions so as to try and estimate how much has been spent effectively on nutrition. PERs are discussed in greater detail in Module 5.

1.2.5 Accounting and monitoring

Accounting and monitoring of revenues and expenditure informs whether the budget is being implemented as agreed. It provides management information and financial control. This process can identify overspending, under-spending, and savings. Accounting (the recording of expenditure) and monitoring (the assessment of those recordings) can be carried out in the form of producing monthly, quarterly, or annual reports for different users. Some countries carry out a mid-year budget review or budget execution reports, which are publicly available.

There are two main aspects to consider when accounting for and monitoring the budget. The first is a control function: ensuring that funds are correctly applied and that spending is economical, appropriately authorised and recorded, and in line with the budget. The second is a development function: ensuring the execution of the budget enables the achievement of intended targets.

While monitoring of service delivery and outputs is generally outside of budget monitoring, it is an especially important component of nutrition interventions that should occur during budget execution. In particular, activities that are included in a larger package of activities are difficult to track

through budget monitoring alone since integrated packages can be paid for and delivered without fully implementing the nutrition component. Nutrition stakeholders should include monitoring of service delivery and outputs as part of the costed strategic plan and of the budget to ensure activities are being delivered. Activities, such as severe acute malnutrition (SAM) treatment, are also often not monitored as effective reporting systems have not been put into place.

The accounting and monitoring stage should happen in parallel with budget execution. However, we often find that accounting and monitoring is done retrospectively, providing information on what happened in the previous fiscal year instead of what is happening during budget execution in the current fiscal year.

Implementing agencies are responsible for accounting for and monitoring their own budgets. The Ministry of Finance or the Ministry of Planning can also play a role, but due to their limited staff and skills a more realistic role for them may be to ensure that ministries are monitoring themselves (i.e., checking whether appropriate monitoring information is reaching decision makers and being acted upon).

Where resources are limited, the focus must be on the most critical projects. CSOs and research institutions can also play an important role at this stage by providing information on projects in which they are involved.

1.2.6 Audit and evaluation

Finally, there needs to be financial and legal probity regarding the actual use of the budget (versus the intended use) and the impact of expenditure. The findings of the audit should be used in improving the design of programmes and policies, in allocating resources, and in removing operational bottlenecks.

External auditing consists of mechanisms and processes designed to ensure that planning, budgeting, and resource use conform to a country's laws and pursue objectives defined by parliament and government. Auditing is generally carried out by a supreme audit institution, which is often a national body responsible for scrutinising public expenditure and providing an independent opinion about how the executive has used public resources.

Effective auditing of both finances and service delivery can give parliament and the public an objective description of how public funds have been spent. Specifically, it can help:

- Detect irregularities in the use of public funds
- Identify management weaknesses;
- Identify patterns of waste and inefficiency; and
- Provide reliable data about programme results.

Audits and evaluations can, for example, examine value for money and equity issues resulting from

Since most nutrition interventions cannot be identified within the health sector budget, expenditure on these activities also cannot be tracked. It may, however, be informative for nutrition stakeholders to assess spending on those health programmes that contain nutrition interventions.

budget allocations and execution. Where some regions receive more per capita expenditure than others, an audit examines whether this difference reflects the needs of the population and whether it creates a more inequitable distribution of resources.

Evaluation is generally requested and overseen by the executive branch of the government. Evaluations may be used to enhance accountability, strengthen programme management, and support decision-making. Evaluation studies are an important source of information and analysis and may be useful in changing the composition of expenditure allocations to shift resource allocation to areas of greater priority and need. They can also have a learning function, feeding into evidence-based policy. The results of the audit and evaluation feed into future plans and act as the first stage of the next budget cycle through the next policy review. In this way, the budget cycle begins once again.

Budget evaluation is an exercise that can have certain characteristics similar to those of a PER: it is an analytical exercise that combines routine and non-routine data and makes an explicit analytical effort to assess expenditure performance. Nutrition stakeholders can use budget evaluation exercises as an opportunity to periodically request a special focus on nutrition expenditure.

1.2.7 Budget cycle summary

The six stages described below present an idealistic picture of how each of the elements work together to achieve constant improvement in planning and implementation. Table 7 summarises activities that may occur at each stage of the budget cycle. As described above, these activities present

opportunities for nutrition stakeholders to engage in the process.

Table 7: The budget cycle stages: what, who, and how

Stage	What	Who	How
Policy review	Review existing policies, existing global guidelines, update them, and design new ones where necessary	<ul style="list-style-type: none"> • Government • Non-governmental organisations (NGOs) • CSOs 	<ul style="list-style-type: none"> • Public expenditure analysis tools (e.g., PERs) • Annual reports to parliament • Situation analyses
Strategic planning, cost estimation, and prioritisation	Develop plans that link policy and budget	<ul style="list-style-type: none"> • Ministry of Finance • Ministry of Planning • Ministry of Health 	<ul style="list-style-type: none"> • Sector and cross-sectoral strategies • Calculate costs of full implementation of strategies • Coordinate and prioritise interventions • Develop alternative plans based on different budget scenarios
Budget preparation and approval	Annual budget law, Medium-Term Expenditure Framework, and budget guidelines	<ul style="list-style-type: none"> • Ministry of Finance • Ministry of Health • Cabinet • Parliament 	<ul style="list-style-type: none"> • Calculate overall resource availability and define aggregate expenditure ceiling • Define line ministries' expenditure ceilings • Prepare and distribute budget guidelines • Line ministries submit draft estimates to Ministry of Finance • Ministry of Finance reviews and discusses • Finalise ministries' budgets and consolidate • Submission to parliament for approval
Budget execution	Resources are used to implement the policies via the budget	<ul style="list-style-type: none"> • Ministry of Finance • Ministry of Health • Service delivery units 	<ul style="list-style-type: none"> • Ministry of Finance releases funds in line with budget approved by parliament • Ministry of Health allocates funds to spending units • Procurement of goods and services • Payments are made for goods and services procured • Transactions are recorded in the accounting system • In-year management of programmes
Accounting and monitoring	Measuring, accounting, and monitoring financial and non-financial performance	<ul style="list-style-type: none"> • Ministry of Finance • Accountant General • Line ministries • NGOs, CSOs, and research organisations (monitoring) 	<ul style="list-style-type: none"> • Produce monthly, quarterly, and annual reports • Identify overspending, under-spending, and savings
Audit and evaluation	Financial and legal probity regarding the impact of expenditure	<ul style="list-style-type: none"> • Auditor-General • Public Accounts Committee • Ministries, NGOs, CSOs, and research organisations 	<ul style="list-style-type: none"> • External audit undertaken by Auditor-General • Reports reviewed by Public Accounts Committee • Detect irregularities involving misuse of public funds • Identify waste and inefficiencies • Provide reliable data on programme results

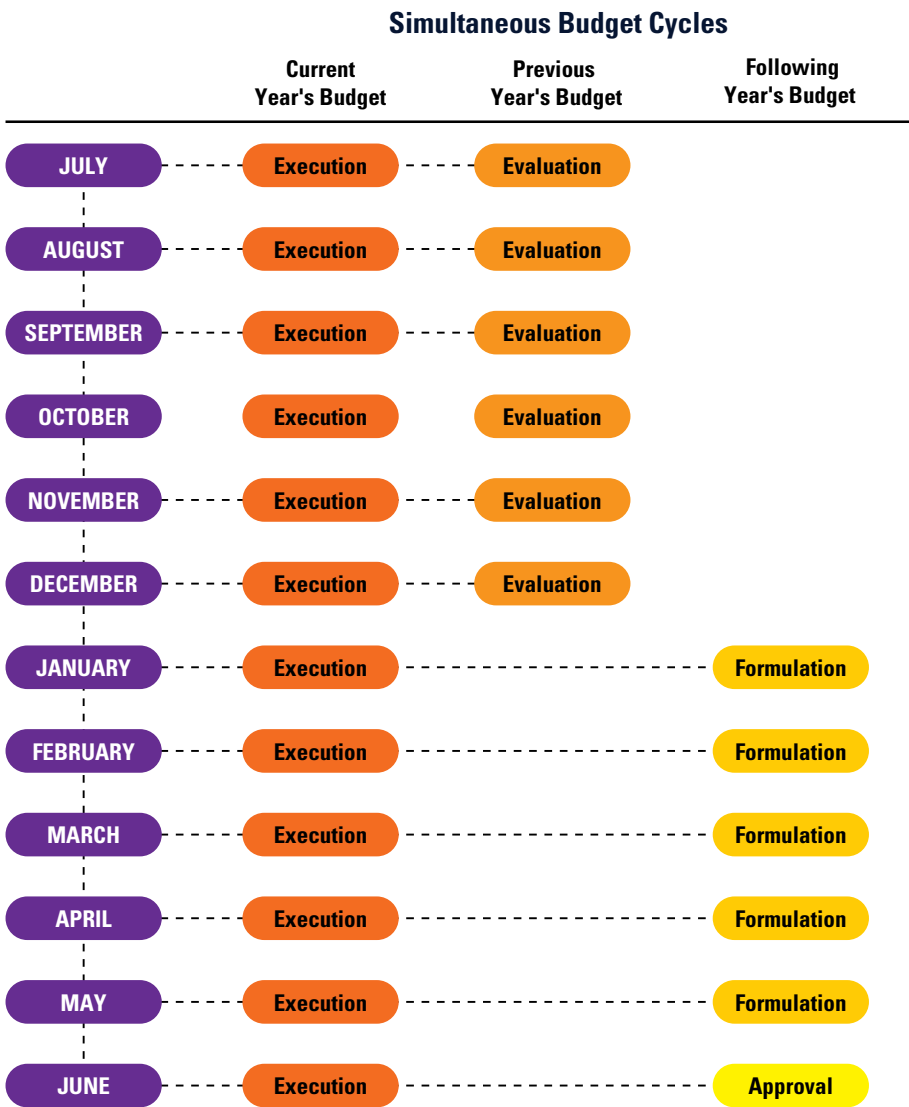
Source: OPM PF4C Learning Module

2. Budget cycle timing

It is important to note that, at any point in time, the government is engaged in multiple overlapping budget cycles that take place simultaneously. The government may be engaged in planning the next year’s budget, implementing the current year budget, and conducting an audit of the previous year’s budget (Figure 17). Ideally, information on budget execution and previous year performance will inform the budget

planning process. As discussed, however, this is frequently challenging. The timelines presented in Figure 17 represent a budget cycle beginning in July but are indicative and for illustration purposes only. The different stages of the budget cycle will not necessarily take these precise time periods but it is useful to see the overlapping nature of the budget cycle across the year.

Figure 17: Budget cycle timeline



3. Concluding remarks

The relative importance of each budget stage will vary from country to country but the budget formulation and the budget execution stages are where nutrition stakeholders should pay the most attention. This is because the budget formulation stage is when resources are allocated to line ministries, such as the Ministry of Health, and line ministries determine how the resources that are allocated to the various programmes (such as nutrition). The budget execution stage is important to ensure that money is spent as planned and that blockages are addressed if they arise. For example, it may be the case that the purchase of SAM commodities is blocked by procedural controls, which will ultimately put at risk the availability of SAM treatments in health facilities. The budget execution and budget formulation stages are also vital to highlight since COVID-19 has decreased the fiscal space and impacted policies across different countries, henceforth, the MOH needs to prioritize the formulation and execution of clear budget plans.

Opportunities exist throughout the budget cycle for nutrition stakeholders to participate and to improve nutrition prioritisation in the health sector as well as throughout the government. The budget process starts with a review of existing policies, the updating of those policies and programmes, and developing new policies and programmes where necessary. Nutrition stakeholders can use this opportunity to identify information to support an evidence base for nutrition interventions. This may include internal programme documents, but it may also include external evidence to support solutions for meeting identified needs through a situational analysis. During the strategic planning stage, planners can engage the Ministry of Finance (and Ministry of Planning), which helps nutrition stakeholders ensure they understand the process but also educates decision makers regarding the importance of nutrition in advance of the budget planning.

During the budget formulation, it is important for nutrition stakeholders to advocate for nutrition at all levels of government where decisions are being made. This may be at the national Ministry of Health

or it could be with local level government committees. Stakeholders need to have a compelling case to 'sell' to decision makers, including providing evidence to support that the package of interventions achieves national goals and objectives and provides impact at the level of the decision maker (e.g., national, regional, local). A well-developed costed plan with evidence-based interventions that achieve national goals is a good advocacy tool. However, as many nutrition interventions are subsumed into larger health packages, it is often a challenge to ensure that nutrition activities are adequately funded. Often the focus is on the adequate funding of the larger health packages (of which nutrition interventions are a part) rather than on implementation of the nutrition component.

Management of budget execution is crucial to ensure budgets are implemented as planned. Accounting and monitoring of revenues and expenditure informs whether the budget is being implemented as agreed. It provides management information and financial control. While monitoring of service delivery and outputs is generally outside of budget monitoring, it is an especially important component of nutrition interventions that should occur during budget execution. In particular, activities that are included in a larger package of activities (such as nutrition activities) are difficult to track through budget monitoring alone since integrated packages can be paid for and delivered without fully implementing the nutrition component. Nutrition stakeholders should include monitoring of service delivery and outputs as part of the costed strategic plan and the budget to ensure activities are being delivered.

Finally, nutrition stakeholders should support the development of evidence through audit and evaluation. These studies are an important source of information and analysis and may be useful in changing the composition of expenditure allocations to shift resource allocation to areas of greater priority and need within nutrition and to support nutrition as a priority within health. The review of the audit and evaluation results act as the first stage of the next budget cycle.



MODULE

3

Fully Costing a Strategic Plan



Overview of the module

Linking policies and budgets is a major challenge in many countries. A large part of this challenge is translating the costs of activities in a strategic plan to budget across a variety of programmes delivering

nutrition interventions. This module will address the components of fully costing a strategic plan that will allow plans to be more readily mapped to budgets and outcomes.

A. Why is this module important?

When developing strategic plans, the goal is for each ministry or sector stakeholder group to coordinate around the shared policy goals. The ideal result is a fully implementable plan that considers capacity constraints regarding implementation (both financial and human resources) to develop a plan mapped to achievable results over time.

Developing a costed plan is necessary to identify how many government resources are required to implement it, as well as to benchmark the cost of the plan against the available fiscal space. The fully costed plan includes coordination with non-governmental partners to ensure all activities in the plan are assigned and aligned and to identify where partners may be able to relieve governmental financial constraints. COVID-19 has impacted population nutrition needs and also the way in which health services needs to be delivered, both of which impact the cost of nutrition programme delivery.

This full costing of strategic plans allows planners to budget for necessary government resources and to ensure partners are working in sync with the government to reach the goals of the plan and ensure the financial sustainability of activities included in the strategic plans to improve nutrition outcomes.

B. Why does this matter for governments?

In this module, you will learn how to link strategic plans to the budget cycle. Your ability to influence budgets for nutrition can be improved by providing decision makers with key information including the full cost of implementation, the cost to governments, key partner commitments, and the expected outputs and outcomes from planned activities in the medium term.

This module will explain the connections between strategic plans and budget formulation.

C. Learning objectives

The objective of this module is to familiarise participants with the elements of a fully costed plan and budget cycle and to provide a framework for developing a costed plan to influence the budget process. By the end of this module, you will be able to:

- discuss key elements of a fully costed plan;
- discuss the difficulties in collecting information for cost elements; and
- identify the trade-offs of different costing approaches.

D. What does this module cover?

In this module we will first review the benefits a fully costed strategic plan and discuss the key elements of costing decisions. We will discuss the benefits and limitations of including these elements in a costed plan.

E. Reading materials

Core readings

- MQSUN (2014) 'Planning and costing for the acceleration of actions for nutrition: experiences of countries in the Movement for Scaling Up Nutrition', Scaling Up Nutrition (SUN), available at: https://mqsunplus.path.org/wp-content/uploads/2018/09/SUN_SynthReport_FINAL.pdf. Read the Introduction

and Summary (6 pages) to get an understanding of the importance of costing a strategic plan, the costing process and who needs to be involved in it, some basic principles that should be adhered to in the costing process, and how to ensure the costing and planning process is useful.

- MQSUN+ (2018) 'Assessing readiness for costing of a common results framework or national nutrition plan', SUN, available at: https://mqsunplus.path.org/wp-content/uploads/2019/07/MQSUN_assessing-readiness-for-costing_guidance-note_19July2019.pdf. This is a 10-page guidance note to assess whether a country's nutrition plan contains the details and information required for an accurate costing.

Suggestions for further reading are given at the end of the module.

1. The fully costed plan in the budget cycle

1.1 Importance of the costed plan

The focus of this module is the costed plan—the link between strategic planning and budget formulation. A well-developed costed plan provides nutrition stakeholders with the information needed for decision makers to fully understand how nutrition programmes can be delivered for outcomes, who is implementing them, and who is providing the budget for each activity.

A major challenge is that many strategic plans provide a 'wish list' but do not provide a close link between budgets and policies and nutrition outcomes. The critical factor is to ensure that the elements of the strategic plan are reflected in the appropriate annual budgets (which determine governments' spending plans), as well as in those of nutrition development partners supporting country efforts to scale up nutrition interventions. Existing plans need to be assessed and adapted to account for the impact of COVID-19 on population needs and, or, the way in which services need to be delivered.

Through this module, you will learn and examine some of the key elements in costing that provide the connections from strategy to budget. When developing strategic plans, the goal is for each ministry or sector stakeholder group to coordinate around the shared policy goals. The objective is to develop a fully implementable plan that considers capacity constraints regarding implementation (institutional, human resources, and financial) and to develop a plan mapped to achievable results over time.

This is often an iterative process, where the initial timeline of activities is based on current institutional and human resources capacity. The approach should prioritise the specific initiatives to identify where capacity building is required prior to implementation of other initiatives and to acknowledge where financial constraints may possibly require a delay in the full execution of the approach.

Once the plans have been fully developed to address the needs and constraints and a timeline has been established to understand when activities should be implemented to achieve the stated goals, the plan needs to be fully costed to ensure understanding of:

- the full cost of implementing the plan across years;
- the cost of activities currently in the budget;
- the cost of new activities that need to be included in the budget;

- the activities (and cost of activities) implemented by non-governmental partners; and
- the new activities (and costs of new activities) expected to be implemented by non-governmental partners.

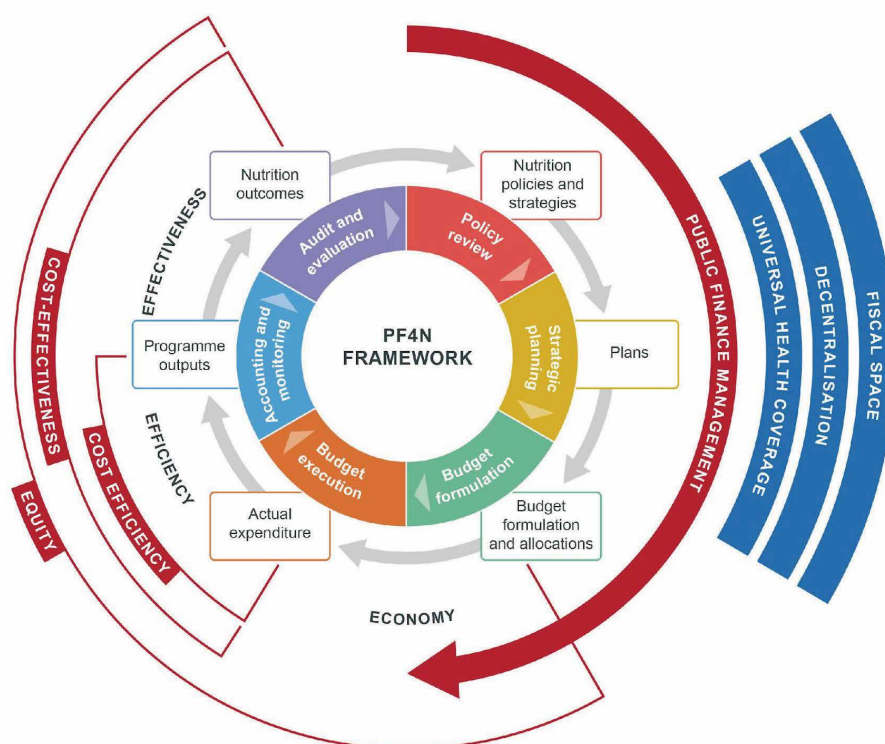
This full costing allows planners to budget for necessary government resources and to ensure partners are working in sync with the government to reach the goals of the plan.

1.2 Cost estimation in the budget cycle

Figure 18 illustrates the budget cycle. Cost estimation is one of three phases of developing an action plan. The three phases are as follows:

- strategic planning;
- cost estimation; and
- prioritisation.

Figure 18: Costing in the budget cycle



Cost estimation allows for the translation of plans to budgets. It also helps in identifying where financial and other resource constraints exist, which in turn

helps stakeholders prioritise the timing of activities and interventions to produce the best results.

1.3 The costed plan and links to the budget

Costed plans lay the groundwork for programme implementation and should clearly describe the links from activities to results. Unfortunately, this also means they may not be naturally aligned to government budgets that are designed for administrative ease and are divided by administrative cost centres.

Most budgets in the Asia region are administrative and include input-level line items (e.g. salaries, fuel, travel) rather than programme activities (such as 'nutrition services'). Linking costed plans to budgets, therefore, requires the costed plan to be disaggregated or deconstructed into the same categories as the budget. This means that input-level budgets require input-level costing to make the strongest links between them.

In general, the fully costed strategic plan is more similar to a 'programme budget', which is a form of performance-based budgeting. The aim of this type of budget is to shift from a focus on inputs to a focus on outputs (services delivered) and to improve the quality of public expenditure. In a programme-based budgeting system, a programme is a clearly defined set of services that deliver one or more of the core functions contained in the ministry's legislated and assigned mandates. The central idea is that a programme should form a set of activities that contribute towards a common objective. A costed strategic plan is a defined set of activities that work towards achieving the same goals or outcomes.

With a programme budget, as with a costed plan, the

budget is classified into programmes such as 'hospital services' or 'nutritional services' rather than along administrative and input lines. This indicates how much money is spent to deliver particular services and outcomes. It requires the systematic development and presentation of key performance and cost information about each programme, including:

- programme objectives and how these link to sectoral strategies;
- programme outputs (or services) and how these support the programme's objectives; and
- programme activities or inputs, which will be used to deliver the outputs.

A challenge with linking programme budgets to costed plans is that programmes in nutrition plans do not necessarily coincide with programmes in the health sector budget. To map nutrition programmes to health budget programmes, we still need a good understanding of the components of the programmes to ensure the elements of the costed plan can be effectively used as a budget template.

The fully costed plan can provide the link between policies and outputs in the same way a programme budget is meant to achieve these goals, but it does it outside of the budget systems. While the costed plan can provide maps to the budgets, it still requires significant effort to maintain the connections and to ensure reporting mechanisms are created to provide the feedback necessary for continuous improvement.

2. Elements of a fully costed plan

How well we meet the objectives listed above depends crucially on which elements are included in the costing methodology and what data are available to support it.

A well-developed fully costed plan allows us to understand the full cost of achieving common goals and strategies. Fully developed plans reflect what would be needed to achieve desired results and can be used as a reference for implementation. This implies the need for more detailed planning and budgeting at sub-national levels, coordination with partners, and annual or time-bound milestones.

Plans can be used as tools to map implementation and impact. Comparing plans to budget allocations is one way of tracking implementation progress; more detailed plans and budgets allow for better tracking of

implementation. Our ability to track progress—and to make connections to impact—depends on what details we provide and track.

Plan cost estimation should not be confused with national budgeting. Cost estimation in this context is fully calculating the costs of implementing an entire plan regardless of the source of the funding or the implementers. Budgeting is the annual process of prioritising the elements of the costed plan to be funded by the government based on the country's forecasts of likely revenue and expenditure projections and the resulting sector budget guidelines. The costed plan provides a roadmap to the government budget. The extent of the linkages depends on the elements of the cost estimation strategy we employ.

2.1 Key plan considerations

Ideal plans reflect national strategic goals, priorities, and commitments within a specified timeframe, while actual plans often include elements that may not have gained full commitment. Strategic plans also reflect sector involvement in implementing these priorities and commitments, but will only reflect the input of the stakeholders involved. If the goals of the strategic plan are accomplished through involvement with groups not included in planning, we will not be able to attribute their actions to the outcomes of interest.

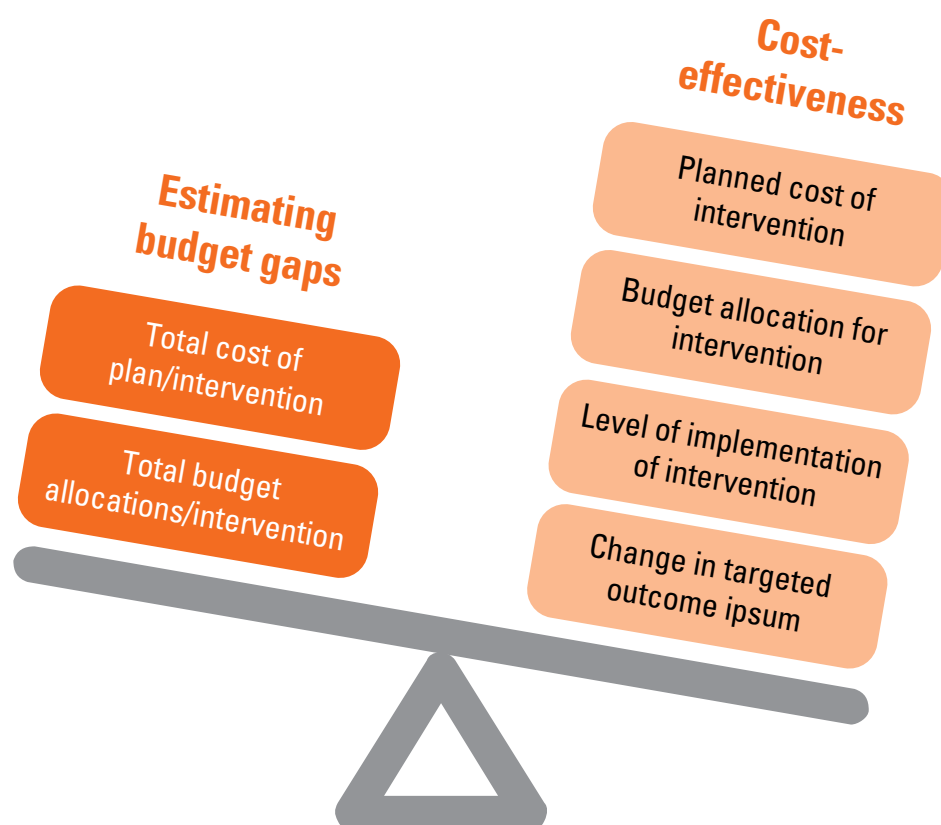
The ability to use plans for specific budgeting objectives depends on decisions made when the plans are developed. There are a number of purposes for developing cost estimation, including:

- to understand necessary government commitments;
- to understand new resources needed;
- to understand existing resources utilised;

- to improve participation in nutrition
- to understand the sectors, sub-national involvement, and partners;
- to understand development partner activities;
- to mobilise non-government spending;
- to set up systems for tracking resources;
- to track spending and implementation;
- to evaluate cost-effectiveness; and
- to coordinate prioritisation of activities across sectors.

Different purposes require different levels of cost estimation. More ambitious goals require more detailed and time-consuming costing approaches. Identifying gaps in plan implementation requires alignment with budget lines and details. Figure 19 illustrates a comparison of the level of detail required to answer different questions using cost estimation and analysis.

Figure 19: Balancing the goals of cost estimation with the resources required



How we develop the costed plan has implications for how the plan can be used. The next section describes

key decisions to be made in cost estimation strategies depending on the goals of the plan.

2.2 Key decisions in cost estimation of strategies

2.2.1 Inclusions and exclusions

What is included and excluded in the costed plan are the key drivers of our ability to map strategy to activities to budget. Primary considerations are listed below.

Stakeholder and sector involvement

The information included in the costed plan comes from those involved in the planning. To get a full picture of all activities underway as well as of those that need to be developed, all relevant stakeholders need to be included. This may mean bringing

stakeholders into the planning conversation who are not usually involved in the planning but who are undertaking nutrition activities. This could include donors, civil society networks, or government sectors and departments not traditionally seen as implementers of nutrition programming. Any stakeholder not involved in the planning and not included in the costing will limit our ability to see the full picture of nutrition activities. This is especially problematic where multiple stakeholders are responsible for implementing and/or funding a single

activity and one or more stakeholders are not included as part of the costing. We do not get a full sense of the costs and we also lose the ability to hold stakeholders accountable.

Stakeholder involvement will affect the comprehensiveness of the plan. The number and types of activities will be limited and we can lose the multi-sectoral view of activities. The cost perspective will be limited to those included in the plan: the selected sectors, the government departments, or all stakeholders involved in nutrition programming.

New versus existing interventions

Another decision factor is whether to cost all planned activities or just new activities that will be part of the government budget. Some governments choose to focus on new activities in the costed plan. The benefit of this approach is that it is a direct reflection of new budget requests. The downside is that it does not reflect all activities supporting a common goal, limiting our ability to analyse the full picture. It also does not include non-governmental stakeholders. The more activities that are excluded from the costed plan, the more it is removed from being a reflection of the overall policy goals.

New versus existing resources

The same arguments can be used when deciding whether to include existing resources or to focus only on new resources in cost estimation. Inputs such as personnel, equipment, and infrastructure are often outside programme budgets and are considered 'existing' resources. This approach tends to understate needs because these inputs are not considered in scale-up scenarios. Under this approach and when looking to grow existing activities, it is especially important that these inputs should be considered to be new when additional hiring and construction is needed.

The impact of COVID-19

The COVID-19 pandemic is having worrying impacts on households' incomes, food supply chain, health services, nutrition and schools among other services and sectors. At the start of the crisis, research shows that around 10.5 million children in Asia were suffering from wasting, 78 million were stunted and 17 million were overweight, while 400 million women were anaemic. These results are due to many difficulties rising in terms of access to affordable healthy diets during the pandemic.¹⁹

A statement by the UN on nutrition in the context of COVID-19 in Asia focuses on six different domains for healthy diets; maternal, infant, young child nutrition, management of wasting, micronutrient supplementation, school feeding and nutrition surveillance.

For example, for pregnant and breastfeeding women, the statement specifies that nutrition services including iron and folic acid supplement provision should continue where antenatal care is being provided with appropriate covid infection control measures. For mother and children 6-23 months, social protection measure to safeguard diets should be a priority. In terms of management of wasting in the context of COVID-19, the statement considers intensifying pre-positioning of essential nutrition commodities, and to reduce the frequency of follow-up visits to once per month while increasing the take-home rations of nutrition commodities.

Considering the different measures needed to adapt to COVID-19 pandemic, linking policies and budgets and translating into a strategic plan is a major challenge in many countries.

19 UNICEF, Joint statement on nutrition in the context of the COVID-19 pandemic in Asia and the Pacific, 2020, <https://www.unicef.org/rosa/sites/unicef.org/rosa/files/2020-04/Joint%20UN%20statement%20on%20nutrition%20in%20the%20context%20of%20COVID%2017%20April%20final%20signed.pdf>

2.2.2 Identifying nutrition interventions in broader programming

Nutrition interventions are rarely standalone activities. They may be adjustments to existing activities that improve nutrition outcomes, integrated into larger programmes, or cross-programme units. To effectively cost a nutrition strategy, we need to identify only those activities—or elements of activities—that contribute to nutrition outcomes.

Integrated programmes

Integrated programmes are those that include a number of activities where some inputs are specific to the nutrition intervention, but other elements are shared with activities with a different strategic purpose. Costs of nutrition activities are hidden in larger programme activities. An example of an integrated programme is a pre-natal check-up that includes Infant and Young Child Feeding (IYCF) counselling. The primary purpose of the visit is to monitor the health of the mother and child. IYCF counselling is an additional component in the larger programme. It may require separate cost elements (e.g. training for medical personnel; brochures for

patients), but it also requires shared cost elements (e.g. personnel time; health facilities). To ensure the costed plan only calculates those costs attributable to nutrition outcomes, it is important to understand the shared costs involved.

Dispersed programmes

Dispersed programmes are activities that cross-programme units. This could include programmes that are implemented by both governmental and non-governmental organisations (NGOs) (e.g. provision of severe acute malnutrition (SAM) treatment services is done in some communities by government and other communities by an NGO) or activities that cross ministries or departments (e.g. health develops a handwashing campaign programme to be implemented in schools, health facilities, food markets, and restaurants). In these cases, it is important to capture both the planning and development costs, but also the training and implementation across all sectors.

2.2.3 Methodology

The cost methodology we choose will affect the level of plan detail. We have the choice between input costs and programme unit costs.

Input costs

Input costs provide detailed costs of the activity. This is often referred to as a ‘bottom-up’ or ‘ingredient’ approach to costing. The ingredient approach takes a detailed look at all the inputs that go into implementation, as well as the timing of the inputs. This includes identifying direct costs (e.g. labour, supplies, travel, food and medicine, buildings, equipment, and utilities). It also requires estimating indirect costs of management, administration, and overhead expenses, as well as governance costs and monitoring and evaluation (M&E) activities.

Direct costs are calculated based on the quantity of the inputs used and the unit cost of the input. Indirect costs are often estimated using a percentage of direct costs based on country averages or global estimates.

The benefits of using input costs include that it provides detailed cost information, allows for better estimation of scale-up, improves the ability to monitor programme implementation (based on input rather than expenditures), and allows for comparisons of programme implementation versus programme maintenance. Most importantly, the input approach makes it easier to estimate costs of integrated and dispersed activities because it is easier to identify individual inputs that are directly related to the nutrition activities and outcomes.

Table 1 shows the supply and medications costs for the outpatient therapeutic programme (OTP) for Integrated Management of Acute Malnutrition (IMAM). Per-person supply costs can be estimated for the programme and scale-up costs for supplies can be easily determined based on the target number of individuals to be reached. Other costs, such as personnel costs and infrastructure, are costed separately and the unit of scale-up is not the patient (e.g. personnel are assigned to facilities or townships and scale-up costs for personnel should be calculated based on those units).

Table 8: Cost estimation extract from the Myanmar Multi-Sector National Plan of Action on Nutrition 2018/19–2022/23

Key Result	3	Increased quality and utilization of nutrition-related services and optimal nutrition behaviors among PLW, children, and adolescents												
Outcome	3-3	Reduced case fatality rate and prevalence of SAM and MAM												
Output	3-3.1	Increased coverage and quality of IMAM services												
Intervention	3-3.1.1	Scale up integrated management of acute malnutrition (includes facility and community, MAM and SAM screening as per national protocol)												
Activity	3-3.1.1.3	Outpatient Therapeutic Programme (OTP)												
Input	Input category	On-budget or off-budget?	Source of finance	Year of Cost	Inputs		Input cost		Total input cost (currency of input)	FY19	FY20	FY21	FY22	FY23
					qty	unit description	unit cost	currency		Total input cost (2019 MMK)	Total input cost (2019 MMK)	Total input cost (2019 MMK)	Total input cost (2019 MMK)	Total input cost (2019 MMK)
OTP Card + Follow-up	supplies	on-budget	GoM	FY19	29,600	person	0.20	USD	5,920	8,293,328	-	-	-	-
OTP Card + Follow-up	supplies	on-budget	GoM	FY20	59,840	person	0.20	USD	11,968	-	17,026,307	-	-	-
OTP Card + Follow-up	supplies	on-budget	GoM	FY21	94,250	person	0.20	USD	18,850	-	-	27,233,407	-	-
OTP Card + Follow-up	supplies	on-budget	GoM	FY22	125,400	person	0.20	USD	25,080	-	-	-	36,796,787	-
OTP Card + Follow-up	supplies	on-budget	GoM	FY23	126,390	person	0.20	USD	25,278	-	-	-	-	37,663,166
Therapeutic spread,sachet 92g/CAR-150	medications	on-budget	GoM	FY19	29,600	person	0.33	USD	1,709,400	2,394,698,460	-	-	-	-
Therapeutic spread,sachet 92g/CAR-150	medications	on-budget	GoM	FY20	59,840	person	0.33	USD	3,455,760	-	4,916,346,145	-	-	-
Therapeutic spread,sachet 92g/CAR-150	medications	on-budget	GoM	FY21	94,250	person	0.33	USD	5,442,938	-	-	7,863,646,292	-	-
Therapeutic spread,sachet 92g/CAR-150	medications	on-budget	GoM	FY22	125,400	person	0.33	USD	7,241,850	-	-	-	10,625,072,257	-
Therapeutic spread,sachet 92g/CAR-150	medications	on-budget	GoM	FY23	126,390	person	0.33	USD	7,299,023	-	-	-	-	10,875,239,088
IEC material	supplies	on-budget	GoM	FY19	29,600	person	0.30	USD	8,880	12,439,992	-	-	-	-
IEC material	supplies	on-budget	GoM	FY20	59,840	person	0.30	USD	17,952	-	25,539,460	-	-	-
IEC material	supplies	on-budget	GoM	FY21	94,250	person	0.30	USD	28,275	-	-	40,850,111	-	-
IEC material	supplies	on-budget	GoM	FY22	125,400	person	0.30	USD	37,620	-	-	-	55,195,181	-
IEC material	supplies	on-budget	GoM	FY23	126,390	person	0.30	USD	37,917	-	-	-	-	56,494,749

Source: Myanmar Multi-Sector National Plan of Action of Nutrition

Calculating costs based on inputs and identifying the source of finance for each input also sets up the costed plan to align with budget categories, which will help during budget formulation and budget tracking.

One limitation of this approach is that it can be difficult to identify all the inputs that are part of implementing the nutrition-relevant activity, so costs could be underestimated. For new programmes, identifying the level of inputs could be difficult. In addition, data collection for input costs is time-intensive.

Programme unit costs

Programme unit costs provide rough estimates of activities in a costed plan. This is often described as the 'top-down' approach. Rather than calculating costs based on all of the components of the activities, we estimate costs of the entire programme based on similar programmes or programmes from similar countries.

Unit costs are estimated by taking total costs and dividing by the total number of units reached (e.g. children, nurses, health facilities, villages).

Programme costs are then calculated by multiplying unit costs by the number of units to be reached in the plan. Costs can be adjusted based on scaling factors (e.g. inflation or region-, county-, or state-specific costs).

The benefits of using programme unit costs are that it is a relatively quick and easy approach. It can be used to provide initial estimates for new country programmes that can be used as a basis on which to build more specific estimates as programmes are developed and implemented.

Lao People's Democratic Republic uses programme costs to estimate unit costs for scale-up. Table 9 shows the total cost of providing meals to 517 schools over a five-year period. When calculating scale-up to new schools, cost per school can be estimated by dividing the total cost by the number of schools currently served and the total number of years for which costs are provided.

Table 9: Cost estimation extract from Lao PDR National Nutrition Strategy to 2025 and Plan of Action 2016–2020

SO 1: Improve nutrient intake

SO	Intervention	Activity	Intervention/ activity group	Target group	2016–20 total costs
1	19		Provision of food in schools		
1	19	...			
1	19	19.6	Provision of food in 517 schools exclusively in 64 focus points in 56 districts	517 schools	US \$10,178,438

Unit costs = programme costs/units/years = US \$10.2 million/517/5 = US \$3,946/school/year

Source: Lao PDR (2015)

The limitations are that unit costs are assumed to be constant across the target population but may actually vary over time or across populations. Interventions usually include start-up costs. These are not captured when using programme costs from established programmes. On the other hand, if programme unit costs are calculated from new programmes, this will overestimate the ongoing

costs after programme start-up. The same issue occurs if costs decrease over time (intervention versus maintenance costs). Similarly, some costs may recur in cycles that do not match unit cost calculations, which means the unit costs will either be underestimated or overestimated. Overall, programme costs will likely underestimate the true programme costs, especially when scaling up.

2.2.4 Cost collection sources

The source of the data we use to identify inputs and estimate costs affects the precision of the total cost estimates. We consider secondary data sources and primary data collection.

Secondary data sources

Secondary data sources include existing country budgets, external budgets, and other data sources.

Existing country data can come from similar programmes in the country or from the same (or similar) programmes in similar countries.

Considerations include the following:

- Are there programmes in the country that are similar to the one you are trying to cost?
- Are the inputs and scale similar to the planned programme?
- Is the same programme being implemented in similar countries?
- Does the programme size match the planned intervention scale?

External budget sources are costs taken from other sources for similar programmes. These can include programme inputs or programme costs from non-governmental stakeholders. Costs taken from external sources can be misleading, however, since cost structures differ between governmental organisations and NGOs. Consideration should be taken to adjust external costs to reflect what the costs would be if operated by the government.

Other data sources can provide information on individual inputs that may not be currently available in country budgets. Global average costs are less connected to the reality on the ground, but may be a good proxy when local data are unattainable.

Primary data collection

Primary data collection will give the best picture of the costs of implementation at country level. Data can be collected on the specific inputs needed to implement an activity and, on the country, state-, and local-level costs of these inputs. Primary data

collection is usually more relevant and more precise than secondary data collection and provides information on actual implementation of existing programmes.

Primary data collection can include information on the time needed to implement programmes. This may be actual time spent based on observation or surveys, or time based on protocols or standards (normative

standards). (Normative standards may be inaccurate if normative and actual time spent are not well-matched.) Other input costs include personnel records, procurement records, actual expenditures, cost surveys, and current budget lines.

While primary data collection provides the best insight into programme activity, it is time- and resource-intensive to implement.

2.3 Line item budgets and incrementalism

Many countries still operate traditional ‘line item’ budgeting systems as a means of controlling public expenditures. This means that the budget presents a list of inputs that the government is going to spend monies on instead of a list of policy objectives or outputs it intends to deliver. As such, a line item budget will produce decisions on inputs (like salaries) without knowing the policy outputs (service delivery) and outcomes (policy delivery) these are trying to achieve. Budget decisions then tend to be made on an incremental basis by administrative units or by line item rather than by policy intervention. Table 8 shows an example of a typical line item budget.]

By focusing mainly on financial compliance rather

than on service delivery, line item budgeting is not particularly helpful in promoting strategic allocation of resources or operational efficiency. The focus is on detailed expenditure decisions, which tends to lead to micromanagement of ministry/agency operations by central finance agencies and finance ministries. The focus is on whether the allocated amount has been spent (for example) on ‘office supplies’ or a ‘transport allowance’ instead of on ‘breastfeeding promotion’ or ‘handwashing education’. Public managers often have very little managerial discretion, which makes it difficult to hold them accountable for performance. The detailed nature of a line item budget also impedes effective scrutiny of the budget by the legislature.

Table 10: A typical line item budget format

Ministry of Health Currency units (thousands)	2017 actual	2018 estimated	2019 budget
Personnel	1,000	1,150	1,300
Salaries	600	700	800
Wages	400	450	500
Office expenses	750	850	1,200
Administrative	200	300	350
Printing	150	150	200
Utilities	150	150	250
Travel	200	200	400
Capital	400	850	250
Vehicles	0	600	200
Other	400	250	50
Total	2,150	2,850	2,750

Source: Adapted from Shah and Shen (2007)

The costed strategic plan is the link between incremental elements in government budgets and the combined costs and effects of implementing nutrition programming. The ideal costed plan links key factors in implementation to the appropriate budget (government or non-government) and relevant level of

detail (ministry or department) to ensure full implementation of planned activities. Precise mapping will also allow for a more thorough evaluation of the effectiveness of the programme towards meeting nutrition goals.

2.4 Annual budgets and multi-year policies

A traditional budget is usually an ‘annual’ document but the impacts of policies are mostly felt over multi-year periods. Policy commitments imply the commitment of future years’ operational and capital resources to be delivered. Therefore, the current financial year’s budget may capture only a fraction of the resources needed to deliver any policy. In addition to this short-sightedness, annual budgets often experience an expenditure rush at the end of the budget year as allocations may otherwise be lost for the next budget round (regardless of the impact this has on service delivery). This is an important hindrance when it comes to linking policies with budgets and is further explored in the next module on budget execution.

The costed strategic plan lays out activities over a multi-year period. The strategic plan should be considered a ‘living document’ in that it should be revisited each year and adapted to reflect planned activities that did not occur and to determine whether programme goals were being met. This is also an

opportunity to analyse programming costs to evaluate whether costs were appropriately estimated (especially for new interventions) and whether all costs of a planned activity were incurred (i.e. whether a planned programme was fully implemented).

In addition, it is important to highlight the importance of aligning the costed plans with milestones in government cycles, including mid-term expenditure planning cycles. This will help better align planning assumptions in the costed plans to broader fiscal policy considerations and projections. For example, the Philippines has prepared a Medium-Term Expenditure Programme (MTEP) for the health sector that covers a period of three years. Figure 20 shows a summary of the total estimated requirements of the Philippines Department of Health for the period 2019–22. The MTEP is divided into two tiers: Tier 1 estimates the regular budget needs and Tier 2 estimates the additional budget required to finance strategic plans.

Figure 20: Example from the Philippines Health MTEP

Table 5. Total Medium Term Requirements for Health (2019-2022), in Billion PhP

Organizational Outcome	(A) Estimated Regular Budget	(B) Indicative Additional Budget (2019-2022)	(A+B) MTEP (Tier 1+Tier 2)	% of Total MTEP
OO1: Access to Promotive & Preventive Health Care Service Improved	135.72	351.76	487.48	69%
OO2: Access to Curative & Rehabilitative Health Care Service Improved	108.24	60.18	168.42	24%
OO3: Access to Safe & Quality Health Commodities, Devices & Facilities Ensured	2.83	0.60	3.43	0.5%
OO4: Access to Social Health Protection Assured	17.08	1.95	19.02	3%
Others (i.e. GASS, STO)	26.76	4.38	31.14	4%
TOTAL	290.63	418.86	709.49	100%
Fiscal Space (2019-2022)			541.54	
Resource Gap			167.96	

Source: Department of Health Philippines (2018)

In a number of low- and middle-income countries, the recurrent budget is formulated separately from the capital budget and often by different institutions. The Ministry of Health prepares the recurrent budget in coordination with the Ministry of Finance and the Ministry of Planning prepares the capital budget. This is a common practice in countries supported by donor organisations, which is traditionally justified because of the need for developing countries to give greater priority to development or infrastructure projects. This may not be as relevant in middle-income countries that have fewer capital needs.

A separate capital budget, which would have been funded (at least initially) by development partners (and therefore is often called a development budget), causes poor integration of different types of spending contributing to the same policy objectives. Many developing countries are heavily dependent on projects that are externally financed and tend to have a high capital component. For example, one may find health workers' salaries in Health Centre X shown under the recurrent budget prepared by the Ministry of Health, while Health Centre X's building (capital)

might feature in a separate capital budget through the Ministry of Planning, possibly built with external funds under a donor project.

Traditional arrangements for capital expenditures often neglect the need for operating costs throughout the policy cycle. This has led to policy disasters, evidenced by 'white elephant' projects that result in hospitals without nurses. This problem is exacerbated by a dual-budgeting system as there is even less coordination between the two budgets.

A fully costed plan takes dual budgets into consideration. It identifies which government budget is paying for which element of an activity and also links to donor activities and budgets. Upfront planning through a detailed costed strategic plan includes the links necessary to understand all of the funding and delivery service sources required to implement the activity. Using the costed plan as a tool for budget advocacy will help budget planners better understand the full package of costs necessary to achieve desired results and better prepares them to include all necessary elements within and across institutional divisions.

2.5 Off-budget expenditures

Off-budget expenditures are particularly detrimental to linking policies and budgets, as they mean that the budget will only partially cover policies. Off-budget expenditures refer to financial transactions that are not accounted for in the budget. Rather than being a complete statement of public expenditures, the budgets of most countries exclude certain governmental activities. These are also referred to as 'extrabudgetary funds'. Off-budget expenditures can

take the form of direct spending by government ministries, but they are more likely to involve special transactions such as the activities of public enterprises, credit provided, subsidies channelled through the tax system, and often official development assistance not included in the budget. As a result of off-budget expenditures, the actual budget represents an incomplete picture of government policy.

2.6 Costing tools

The methodology used to support costing depends on the purpose of costing as well as the availability of data and staff skills. Table 11 describes some of these tools and provides a summary of the benefits and

limitations generally and for nutrition specifically, where appropriate. Links to the tools are provided for further exploration.

Table 11: Tools for cost estimation

Tool	Source	Benefits	Limitations
Optima Nutrition	http://optimamodel.com/nutrition/	Provides quantitative evidence for the prioritisation of nutrition programmes in the context of limited funding; assists with the development of investment cases and national planning	Requires training of country teams (finance, economics, M&E, key development partners); requires assumptions from the literature that do not always match the context; requires estimates on the costs of scaling up interventions that have inherent uncertainties
OneHealth Nutrition Module	https://www.who.int/choice/onehealthtool/en/	Costs and programme regimes are updated annually; set up to help ensure supporting elements are entered so that costs are not missing	Developed to provide an integrated approach to costing analysis across the national health system; modules such as nutrition attempt to isolate one component of the health system; default values for both quantities and prices; quantities are based on normative standards; costs are country-level or regional or global norms
WBCi IBFAN breastfeeding costing	http://www.worldbreastfeedingcosting.org/wbci/WBCi_Ver_PLUS_2018_July13.xlsFANTA	Cost of protecting, promoting, and supporting breastfeeding	Costing method for single intervention
Community-Based Management of Acute Malnutrition (CMAM) FANTA Excel-based tool	https://www.fantaproject.org/tools/cmam-costing-tool	Costs of establishing, maintaining, and/or expanding services for CMAM	Costing method for single intervention
MINIMOD	https://minimod.ucdavis.edu/models/	Costs to establish, operationalise, and provide M&E for micronutrient interventions utilising LiST	Costing method for single intervention

Tools that are tailored to the individual country are better able to support the specified goals of the country for developing a costed plan, but generally require consultants external to the ministry for development and support. Tailored plans, however, can rely on a combination of the existing tools mentioned above to meet specific goals.

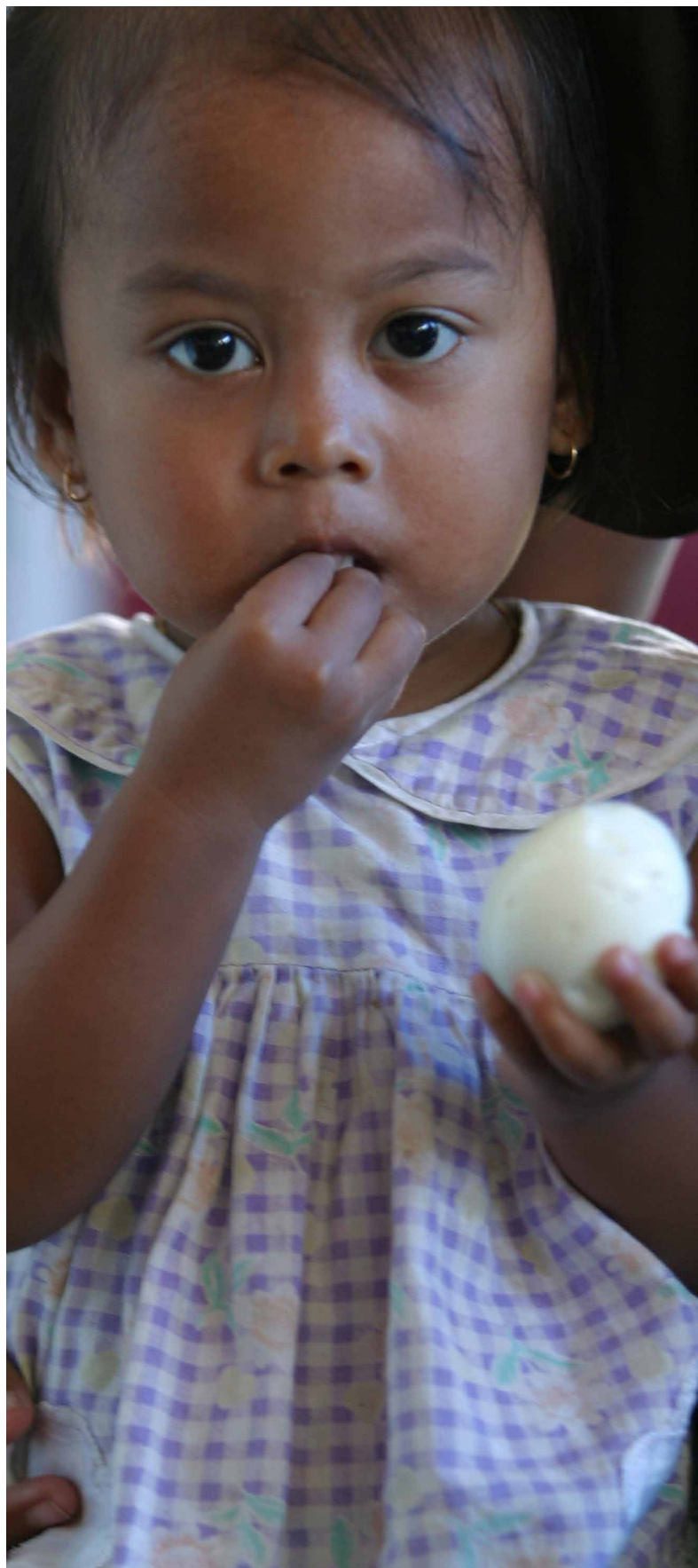
Regardless of the tool being used, it is important to be clear in identifying the methodologies and assumptions used for each intervention so that scale-up calculations are well-defined, limitations are known, and the plan can be used and built on in subsequent planning activities.

3. Concluding remarks

The costed plan is a mechanism to translate policy to budgets. Stakeholders need to understand the elements needed to best connect decision makers with the evidence needed to approve budgets that improve nutrition outcomes. Throughout this module, we have discussed existing budget mechanisms and how the costed plan intersects with budget processes.

The level of detail in a costed plan should be determined both by the goal of the plan (e.g. activity mapping; donor advocacy for nutrition programming; budget advocacy within governments), the availability of data, and the time and resources available to perform the costing.

Regardless of the form of the costed strategic plan, it should be treated as a 'living document'. The costed strategic plan is a multi-year document that feeds into an annual budget cycle and needs to be adapted as actual resources are allocated and expended and as the ability to collect and utilise data increases.



A close-up photograph of a woman with long dark hair, wearing a pink cardigan over a red floral-patterned top, breastfeeding a baby. The baby is wearing a red long-sleeved shirt and blue patterned pants. The woman is looking down at the baby with a gentle expression. The background is slightly blurred, showing a blue fabric and a patterned surface.

MODULE

4

Fiscal Space for Nutrition



Overview of the module

A. Why is this module important?

Achieving Sustainable Development Goal (SDG) 2.2 for Nutrition - 'By 2030, end all forms of malnutrition' - requires political commitment, but it also requires enough financial resources to be invested in nutrition interventions. The recent Kathmandu Declaration of the Scaling Up Nutrition (SUN) movement commits member countries to 'Securing the buy-in of finance ministers, the involvement of parliaments, and a nutrition budget code, where relevant, while increasing domestic investment.' As part of the budget formulation process, ministries involved in nutrition policy and the budgeting of nutrition programmes will engage with Ministries of Finance to ensure adequate resources are allocated to nutrition programmes. However, if ministries engaging with nutrition programmes want to leverage domestic public budgets successfully, it is critical that they understand the macro fiscal constraints faced by Ministries of Finance when working with all government departments in dividing up the total budgetary room available for any given year.

This module relates to fiscal space, or the budgetary room a government has available to invest across all areas, including nutrition. COVID-19 has impacted available fiscal space negatively in all countries in the world. This means that competition for resources will intensify even more.

B. Why does this matter to nutrition stakeholders?

Fiscal space for nutrition concerns the sources of funding for nutrition interventions. This is important because there is a widespread perspective that not enough is spent in Asia on nutrition. One of the ways to spend more is therefore to identify and quantify potential sources of additional funding for nutrition. Below are some examples that illustrate why fiscal space for nutrition is important.

- When Cambodia graduated to middle-income status in 2017, it lost access to a significant part of aid money while simultaneously it increased civil servants' salaries. As a result, little discretionary fiscal space was left for social policy programmes. However, due to a coordinated advocacy effort by the major nutrition stakeholders the Ministry of Economy and Finance allocated additional budget to nutrition and to an iodisation programme for poor and vulnerable children.
- The Government of Bangladesh aims to transition to middle-income status by 2021 and the country's advances in development are gradually changing the nature of development assistance to the country. It is expected that Bangladesh will start receiving fewer Official Development Assistance (ODA) grants, including for health and nutrition programmes, and that it will need to depend more on domestic funds. Nutrition stakeholders need to start considering other sources of financing, such as leveraging domestic resources, to ensure there are sufficient funds for nutrition programmes.

C. Learning objectives

By the end of this module you will:

- understand the concept of fiscal space, current viewpoints regarding the concept, and the main pathways to creating fiscal space for nutrition;
- have an insight into the sources of public domestic revenue and know the advantages and limitations of different sources;
- be informed about current trends regarding ODA in general and for nutrition specifically, and its implications for public finance for nutrition (PF4C-N);
- be familiar with a few examples of how nutrition stakeholders have approached fiscal space challenges; and
- understand how efficiency savings are a source of fiscal space.

D. What does this module cover?

This module will give you a solid basis for starting a well-informed and credible dialogue about how fiscal space can be created in general and for health and nutrition in particular.

In the first section we explore the concept of fiscal space in non-technical terms. We emphasise that, while recognising the technical complexity of the subject matter, stakeholders working on nutrition should and can engage with the basic choices that determine the size of fiscal space. We then look briefly into the process of claiming fiscal space for nutrition and then explore each corner of the fiscal space diamond in more detail—domestic revenue, ODA, borrowing, and efficiency savings—before finishing with a consideration of the role of the private sector.

E. Reading materials

Core readings

- Roy, R., Heuty, A., and Letouzé, E. (2007) 'Fiscal space for what? Analytical issues from a human development perspective', United Nations Development Programme, available at: www.undp.org/content/dam/aplaws/publication/en/publications/poverty-reduction/poverty-website/fiscal-space-for-what/FiscalSpaceforWhat.pdf. Focus on the Executive Summary (pp. i–ii) (2 pages).
- Tandon, A. et al (2020) Economic impact of COVID-19. Implications for health financing in Asia and Pacific. Discussion Paper. The World Bank, available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/34572/Economic-Impact-of-COVID-19-Implications-for-Health-Financing-in-Asia-and-Pacific.pdf?sequence=6>
- Tandon, A. and Cashin, C. (2010) 'Assessing public expenditure on health from a fiscal space perspective', The World Bank, available at: <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/AssesingPublicExpenditureFiscalSpace.pdf>. Read the introduction (pp. 8–10) and Component 3, 'Summary and Conclusions' (pp. 42–43) (5 pages in total).

Suggestions for further reading are given at the end of the module.

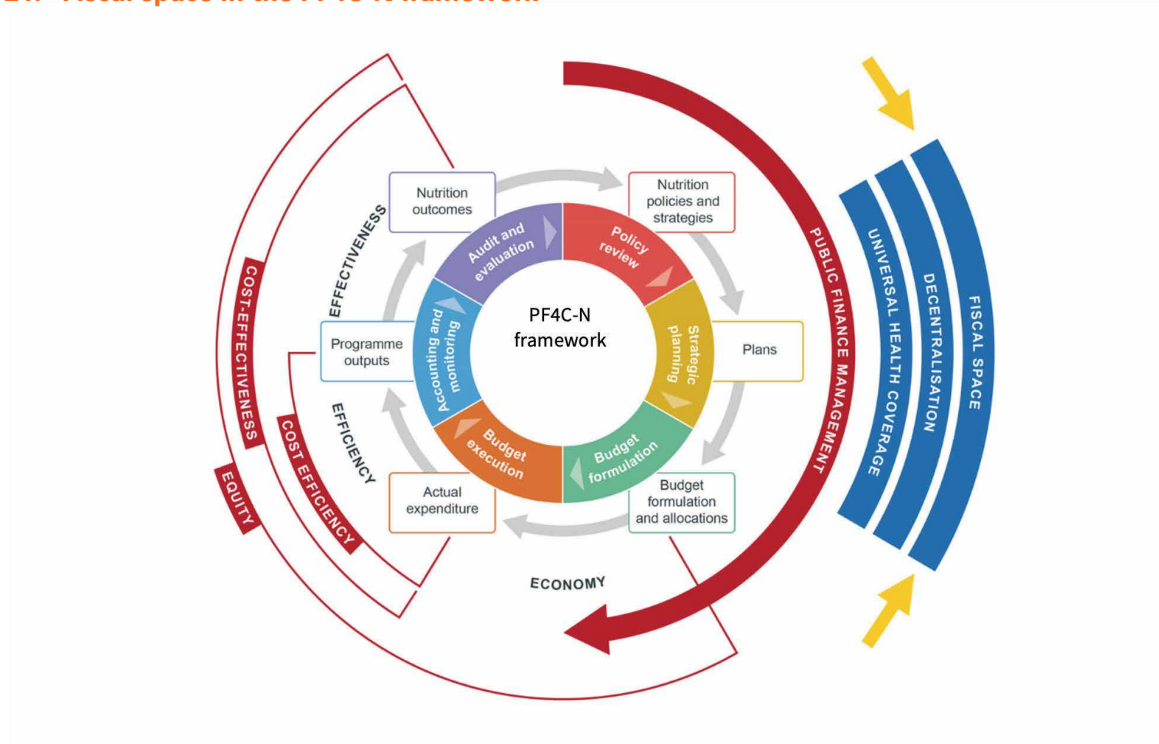
1. Core concepts relating to fiscal space and nutrition expenditure

1.1 Fiscal space in the public finance management (PFM) results chain

Fiscal space is one of the factors underpinning the entire PFM in nutrition results chain. It serves as a 'budget constraint': it determines how much is being spent on nutrition. In this module we will look at the factors determining the overall size of fiscal space, as well as at how to allocate an adequate share of it to nutrition. One important note to make is that

expenditure for nutrition interventions is often intricately part of the Ministry of Health budget. Therefore, increasing fiscal space for nutrition interventions can be achieved by increasing the health budget and by increasing the share of the health budget allocated to nutrition interventions.

Figure 21: Fiscal space in the PF4C-N framework



The concept of fiscal space is complex. In this module, our focus is on the elements that are intuitively clear to stakeholders working in the nutrition sector, and we show why it is important for them to know about fiscal space at the whole-of-

government level.

Heller's definition (Heller et al., 2006) is usually the one adopted by most analyses of what constitutes fiscal space:

"Fiscal space can be defined as the availability of budgetary room that allows a government to provide resources for a desired purpose without any prejudice to the sustainability of a government's financial position."

Budgetary room can potentially be increased through four pathways, each with ramifications and (at times) trade-offs for fiscal sustainability:

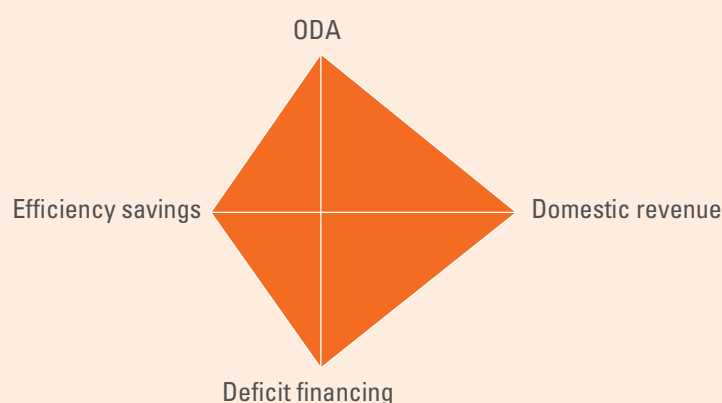
- 1) additional domestic revenue dedicated to a particular purpose;
- 2) additional foreign grants;
- 3) additional borrowing; or
- 4) efficiency gains and reprioritisation of expenditure.

An increase in any of these pathways will lead to an increase in fiscal space, also referred to as budgetary room. Conversely, these are the only ways in which public resources can be increased; they are thus, by implication, the only sources available for publicly funded nutrition programmes. This concept is visualised through a fiscal space diamond (Box 5).

Box 5 Fiscal space diamond

Governments can create fiscal space through the following types of fiscal instruments:

- 1) ODA, through aid and debt relief;
- 2) domestic revenue mobilisation, through improved tax administration or tax policy reforms;
- 3) deficit financing, through domestic and external borrowing; and
- 4) increasing the efficiency of expenditures or reprioritisation of expenditure.



Source: adapted from Roy, Heuty, and Letouzé (2007)

The shape of the diamond reflects the relative contribution of each of the sources to the available budgetary room. In low-income, aid-dependent countries with weak tax systems, ODA will be large in comparison to domestic revenue. In times of fiscal austerity, governments typically force ministries and public agencies to make efficiency savings. When government spending is in excess of government revenue, the resulting budget deficit is plugged by borrowing, often with a view to maintain or stimulate economic activity, which in turn increases tax revenues to pay off the debt incurred.

COVID-19 has had a severe impact on current and future fiscal space, in all countries of the world. The dominant impact pathway was that COVID-19 triggered an economic shock, resulting in economies growing far less than predicted, with negative growth common. This affected tax revenues, the most important source of domestic revenue. Simultaneously the oil price dipped sharply in 2020, also affecting those countries who derive their income mostly from the oil sector. Whereas fiscal revenue sharply declined, need for public health expenditure, social protection measures for households, and support packaged for

businesses rose sharply. The fiscal deficit resulting from decreased revenue and increased expenditure, was mostly plugged by additional debt, pushing some countries into debt distress. In 2020, government tried to manage their budget by cutting non-essential expenditure. Beyond 2020, may governments will find that they have to devote more fiscal space than

expected pre-COVID to servicing new debts. This means more competition for government expenditure, and potentially less expenditure for nutrition. Indeed, in an effort to cut expenditure, we have already seen government budget reprioritisation - with social sector spending, including nutrition, some of the first areas to witness cuts.

1.2 What is fiscal sustainability?

The concept of fiscal sustainability relates to the capacity of a government (at least in the future) to finance its desired expenditure programmes, to service any debt obligations (including those that may arise if the created fiscal space is a result of government borrowing), and to ensure its solvency. In deciding the level and allocation of public expenditure, including on health and nutrition programmes, Ministries of Finance will seek to ensure that expenditures are fiscally sustainable. While this perspective may limit the funding available for health and nutrition programmes, macroeconomic instability can also stand in the way of the government's long-term capacity to fund the health, nutrition, and other social sectors.

For example, the consequences of macroeconomic

instability have been shown to be particularly harmful for socioeconomically disadvantaged children and families. In South America, the ongoing economic crisis in Venezuela is an example of the harmful impacts of macroeconomic instability on families and children, particularly the threat of increasing malnutrition compounded by the inability of the government to mobilise required public expenditure for nutrition-related programmes to mitigate the impact of the crisis on children's nutrition (UNICEF, 2018). Similarly, high inflation and severe shortages of foreign exchange during the Argentina crisis in the early 2000s led to increased child mortality incidences, due in part to drastically reduced access to medical supplies and equipment, much of which was imported (Bozzoli and Quintana-Domeque, 2011).

1.3 Another perspective on fiscal space

Macroeconomists do not, however, necessarily agree on the definition of fiscal space and how fiscal sustainability should be pursued. Critics argue that Heller's definition of fiscal space is too short-term in its perspective, ignoring the longer-term impact of investments in human development, or on social sectors more specifically. For example, investment in well-nourished children and mothers will, two decades later, lead to a stronger, healthier, more productive workforce that is able to contribute towards further economic growth and greater equity. This positive impact of nutrition sector investments is, however, ignored in the short-term approach to fiscal space management that still often dominates macrofiscal policies.

There is growing evidence and recognition that investments in nutrition have long-term beneficial effects, including for economic growth and social stability, and should therefore not be seen as an

expense incurred but rather as an investment in human capital.

There are also complementarities between policies geared towards human development, such as nutrition, health, and schooling or access to water and health. For example, children with poor nutrition status will underperform in school, decreasing the effectiveness of public education spending. The existence of such complementarities makes a strong case for scaling up multi-sectoral public expenditure programmes, given that the payback from an integrated package focusing on human development is higher than the sum of the payback from its individual components (Roy et al., 2007).

The International Covenant on Economic, Social, and Cultural Rights provides a framework under which the different approaches to fiscal space acquire a value and rights perspective. Article 2.1 states that:

'Each State party to the present Covenant undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realisation of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures.'

This paragraph implies a 'maximum available resources' approach (Balakrishnan et al., 2011). Signatories to the Covenant, which has been signed by all countries in Asia except for a few smaller island nations and Bhutan, commit themselves to making resources available to the maximum extent possible to fulfil the right to healthcare, education, and other human basic needs. The Convention on the Rights of the Child also explicitly links UNICEF's mandate to the macroeconomic sphere (in relation to which fiscal space is often considered).

It is true that the technical intricacies of fiscal space are complex and require macroeconomic expertise. However, if countries are to make progress in their commitment to fulfil basic human rights and, at the more operational level, to achieve SDG 2 'Zero Hunger', the subject of fiscal space cannot be left to macroeconomists alone, especially since different views on this subject abound. Since the fulfilment of rights is better achieved if the maximum resources are made available to finance social including nutrition sectors, broader societal engagement with issues relating to fiscal space must take place.

2. Converting fiscal space into nutrition expenditure

Achieving the SDG 2.2 'By 2030, end all forms of malnutrition' requires increased investments in nutrition interventions. One of the most important challenges faced by Asian countries is therefore fiscal in nature. Ministries of Finance are stewards of fiscal policy and of PFM; within the boundaries of the legislative and regulatory framework, they allocate fiscal space to the various ministerial departments and public agencies in pursuit of national development goals. While health sectors are increasingly committed to Universal Health Coverage (UHC), other government departments embark on equally ambitious policy agendas. This then throws up the question of how much of the total government budget should be allocated to particular issues. Governments have to contend with balancing allocations across various ministerial departments and agencies.

The fiscal space available at the whole of government level needs to be allocated across various public sectors, each competing for resources. To ensure that there are adequate financial resources for nutrition programmes, it is not only important to understand the total fiscal space available to the government, but also to ensure that a sufficient part of it is made available to fund the implementation of nutrition programmes. The first step in this process is to identify a set of priority nutrition interventions and to determine how much financial resources are required to implement them. The second step is then to claim the appropriate share of fiscal space to cover the implementation of the nutrition programmes. This process is often complicated because many nutrition interventions delivered through the health system are part of larger programme packages of primary healthcare, including maternal antenatal, delivery, and post-natal care and child health services (as discussed in Module 1, 'Situating the course').

In Module 7 we discuss the costing of nutrition programmes, which tells us how much is needed to implement a nutrition programme. In the remainder of this module, we assume that nutrition programmes have been costed and we concentrate on how to claim the adequate amount of fiscal space to fund their implementation.

There are four common forms of guidance on ‘targets’ for health and nutrition spending, which tell us how much spending is ‘the right level of spending’.

The first form of guidance comes from political commitments. Some of the most prominent in health and nutrition has been UHC on the one hand and SDG 2 ‘End hunger’ and SDG 3 ‘Good health and wellbeing’ on the other. Many countries explicitly commit to achieving targets set for achieving these goals, often with a target date. They thus also implicitly commit to investing the financial resources to achieve these targets. However, the cost of achieving the UHC, SDG 2, or SDG 3 targets are country-specific and the health and nutrition programmes needed to achieve these targets will need to be costed to determine the level of financial investment that is required to achieve the target. Internationally binding political commitments and associated financial targets provide important means to advocate for more resources. However, Ministries of Finance are often asked to honour commitments made by Heads of State, which taken together may exceed the budgetary room they dispose of.

A second approach to informing national health and nutrition spending is based on an international comparison of key financing variables such as health and/or nutrition spending per capita, or the share of health or nutrition spending of Gross Domestic Production (GDP) or of total government expenditure. Comparator countries can be chosen using a number of criteria (such as similarity of economic development level, epidemiological profile, and health policy objectives) or can include countries that serve as a role model. While comparisons of this kind are inherently imperfect, they often provide useful benchmarks in budget negotiations.

The third, and most common, source of guidance to determine an adequate level of nutrition spending comes from the costing of nutrition plans, possibly within a multi-year structure such as a Medium-Term Budgeting and Expenditure Framework. The advantage is that, if costing is done properly, it provides a solid basis for expenditure planning and implementation towards public nutrition goals. The drawback may be a form of path dependency: nutrition stakeholders do not always have the capacity to carry out robust costing, resulting in nutrition budgets being developed based on historic budgeting patterns rather than prospective planning.

The fourth and last form of guidance comes from normative costing exercises. For example, McIntyre and Meheus (2014) propose a lower limit benchmark for public expenditure for UHC which includes nutrition services. They recommend that the minimum acceptable cost of achieving UHC for a basic package of services is public spending of 5% of GDP or US \$86 per capita (expressed in 2012 US \$). Such a benchmark can provide important guidance for budget planning. However, ideally, they should be complemented, or replaced by national-level costing that is both accurate and sufficiently reflective of the stated health policy goals and actual service utilisation patterns.

For nutrition specifically, the World Health Assembly (WHA)’s Member States have agreed on and endorsed specified global nutrition targets to be reached in 2025 for stunting, wasting, overweight, anaemia, low birthweight, and exclusive breastfeeding. However, each country will have to develop a programme of action based on its country context, cost it, and ensure it is adequately financed. As such, there are no normative global funding benchmarks for nutrition.

In what follows we discuss each of the fiscal space diamond corners in turn: domestic revenue, ODA, borrowing, and efficiency savings. We end with a short discussion on the role of the private sector in financing the nutrition interventions.

3. Public domestic revenue

In most countries, public domestic revenue is by far the most important corner of the fiscal space diamond and the assumption is that the lion's share of funding for the national nutrition programme will be funded

by domestically generated revenue. We discuss various elements of public domestic revenue: taxation, reprioritisation of public expenditure, innovative funding sources, and earmarked funds.

3.1 Taxation

Moving from the Millennium Development Goals to the SDGs in 2015 was accompanied by a strong emphasis on domestic resource mobilisation (DRM). Countries mainly generate and collect revenues through taxes to finance services to improve healthcare, the education system, infrastructure, public order, and a whole range of other services for their citizens. DRM is based on the notion that countries collect sufficient resources to fund these services in a sustainable way, on a long-term pathway of sustainable development. DRM is used mainly in the context of the SDG and development aid programmes more generally, but in essence it is similar to public domestic revenue.

Domestic revenue for social spending (such as health and nutrition spending) is a function of several factors: economic growth, tax collection, and the allocation of revenues to social programmes. There is a positive relationship between the level of economic development, as measured by GDP per capita, and the amount of domestic revenue.

Low-income countries collect on average around 15% of GDP of domestic public revenue, mainly through tax collection, whereas the lower bound for high-income countries between 200 and 2007 was 26% (Heller et al., 2006). The International Monetary Fund (IMF) also found that, when countries collect less than 15% of GDP through taxation, they are not able to meet the basic needs of their citizens. This level of taxation—15%—is therefore an important 'tipping point' to put a country on the path of long-term sustainable development (Gaspar *et al.*, 2016).

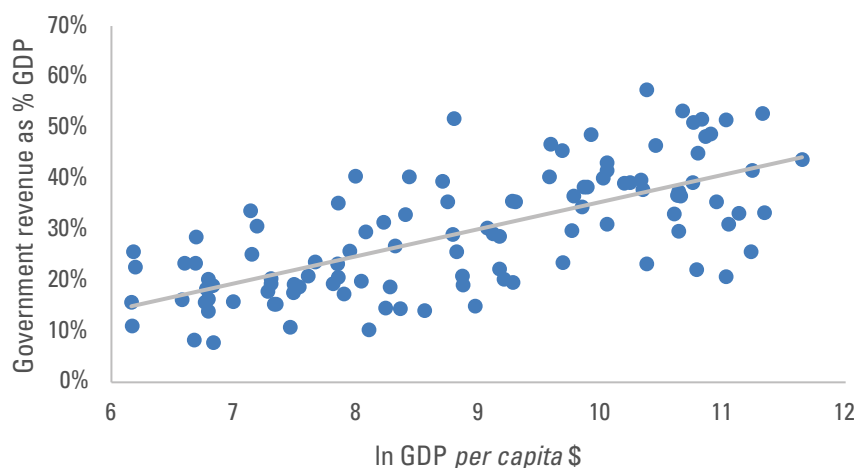
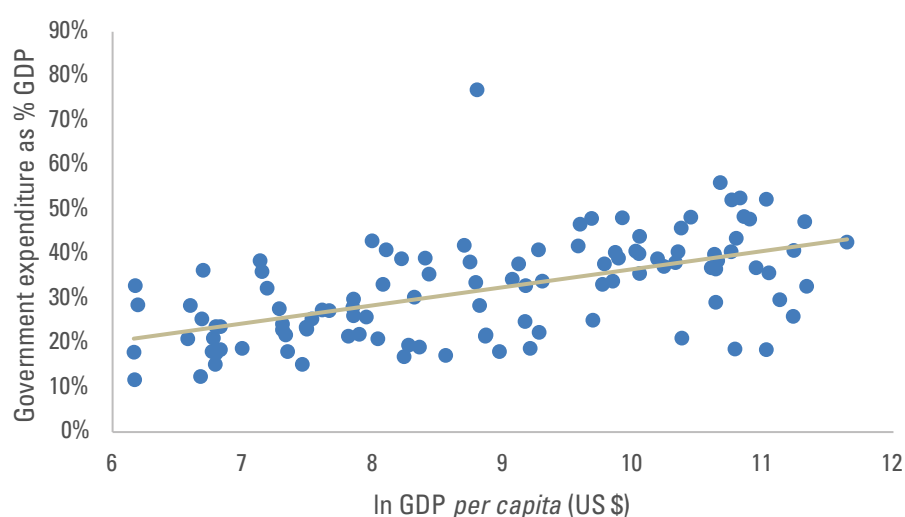
The general expectation is that developing low- and middle-income countries (LMICs) will not only increase the size of their economies, but that they will also increasingly generate resources that can be invested in public interventions. The rate and extent and whether this will offset the retreat of donor

funding depends on a large number of factors, and is therefore a question that needs to be carefully considered within each country individually.

There are several ways in which domestic public revenue can be increased and these will be part of a country's fiscal policy. Essentially, these are: increasing the tax base (the number of organisations and individuals that pay taxes); increasing the headline tax rates (how much tax is paid as a share of economic output); and improving the efficiency of the tax administration (effectively and efficiently collecting the taxes). Although there is a positive relationship between economic development and public revenue (and public expenditure), there is also great variation in this relationship between countries, as shown in the three interrelated graphs below.

This short video (www.youtube.com/watch?v=dZlcR1BtqEc#action=share) explains some of the efforts the Vietnamese tax authorities went through to ensure that they could derive tax revenue from foreign direct investment in Vietnam. This illustrates the need to reform fiscal policies when economies develop.

Domestic public revenue is, firstly, a function of economic development in a country, suggested by a positive relationship between economic development and public revenues (Figure 22). However, this positive relationship is generally weak, and there is great variation between countries, even when acknowledging that low-income countries generally raise less revenue as a share of GDP than high-income countries. For example, government revenue ranges from between 8%–12% of GDP *per capita* in countries such as Pakistan and Bangladesh to more than 50% in countries such as Finland, Denmark, and Norway.

Figure 22: Relationship between per capita GDP and government revenue (2018)**Figure 23: Relationship between per capita GDP and government expenditure (2018)**

Source: Figures 22 and 23: IMF (2018)

The majority of domestic revenue is derived from taxes, the most common of which include consumption or sales taxes, for example on goods and services or on any operation that creates value, therefore often called 'value added tax' (VAT); corporate taxes (applied to companies, including in the financial sector); personal income taxes (e.g. mainly on individuals working as employees); inheritance taxes (applied on bequest); property taxes (e.g. applied to private property and wealth); and tariffs (e.g. taxes on imports or exports). Governments also generate revenue through user fees, such as from tolls (e.g., fees charged to persons travelling on roads, bridges, etc.) or from co-payments for goods and services delivered by the government (e.g. drugs or diagnostic tests in the

health sector). The potential impact of high taxes on the poor and other vulnerable groups is explored in more detail in Module 9, 'Equity in nutrition'.

Annex A summarises seven of the main tax issues that could be included in a fiscal space analysis, along with some key considerations for each.

The revenue potential can vary dramatically from source to source and this will be considered when weighing different tax reform options to generate fiscal space for health and nutrition programmes. It is also unsurprising that the same mechanism does not yield the same level of revenue in every country, as this depends on context-specific variables such as the structure of the economy.

Box 6

Examples of fiscal space studies for nutrition in Timor Leste and Egypt

Fiscal space to scale up nutrition in Timor Leste

In Timor Leste, coverage of nutrition-specific interventions is low and domestic financing accounts for only about 1% of resources for nutrition. Given the need for additional financing to scale up nutrition-specific interventions, the World Bank conducted a fiscal space analysis for nutrition to find out what the prospects for increasing government spending for nutrition were. The analysis found that, because of the fall in oil prices, there was limited potential for fiscal space arising from potential economic growth. While there is the possibility of reprioritising nutrition in the government budget by reallocating resources from Bolsa de Mae (Timor Leste's untargeted social assistance programmes), political economy considerations would not allow it. There is already a high dependence on donors for nutrition and, although in the short-to-medium term it is possible to draw on additional resources, this would not be strategic from a sustainability point of view. The analysis recommended focusing on achieving efficiency gains from current nutrition programmes by prioritising cost-effective nutrition interventions, aligning funds in districts where the burden of malnutrition is the highest, and reallocating budgets from salaries for expensive doctors to lower level frontline health workers who can deliver nutrition interventions.

Source: Provo et al. (2017)

Fiscal space to scale up nutrition in Egypt

To scale up coverage of nutrition-specific interventions to 90%, an estimated US \$82 million additional resources are required in Egypt. A fiscal space analysis was conducted by the World Bank to examine whether existing and projected fiscal space exists to absorb this additional cost. The analysis concluded that, given prospects for economic growth in Egypt, there is potential to generate additional resources for nutrition in the long run. This will be especially true if the government is able to benefit from an increased tax base, levy new taxes, and improve tax collection efficiency. Given high returns on investment in nutrition-specific interventions, reducing undernutrition will also generate further economic growth. In the medium term, however, the best prospect for fiscal space comes from making existing programmes more efficient. Efficiency gains can be realised by focusing on the most cost-effective interventions, which can also be scaled up relatively easily and with limited investment.

TABLE 5.4 Fiscal space for nutrition in Egypt

FISCAL SPACE SOURCE	EXPLANATION	PROSPECT FOR FISCAL SPACE
Conducive macroeconomic conditions	Would increase the medium- and long-term GDP growth from improved productivity due to a reduction in stunting Has potential for improved revenue generation	Good
Reprioritization of nutrition within the government budget	Would strengthen intrasectoral coordination	Limited
Increase in sector-specific resources	Would entail taxes earmarked for health (or nutrition), mandatory fee-bearing programs (such as insurance), or user fees for public health facilities	Limited
Nutrition-specific grants or foreign aid	Egypt is not heavily reliant on aid in nutrition.	Limited
Increased efficiency of the existing sector outlays	Would produce allocative and operational efficiency gains in delivering only the most cost-effective interventions in stunting reduction	Good

Source: World Bank assessment, based on guidelines laid out in Heller 2005.

Note: GDP = gross domestic product.

Source: Connolly (2020)

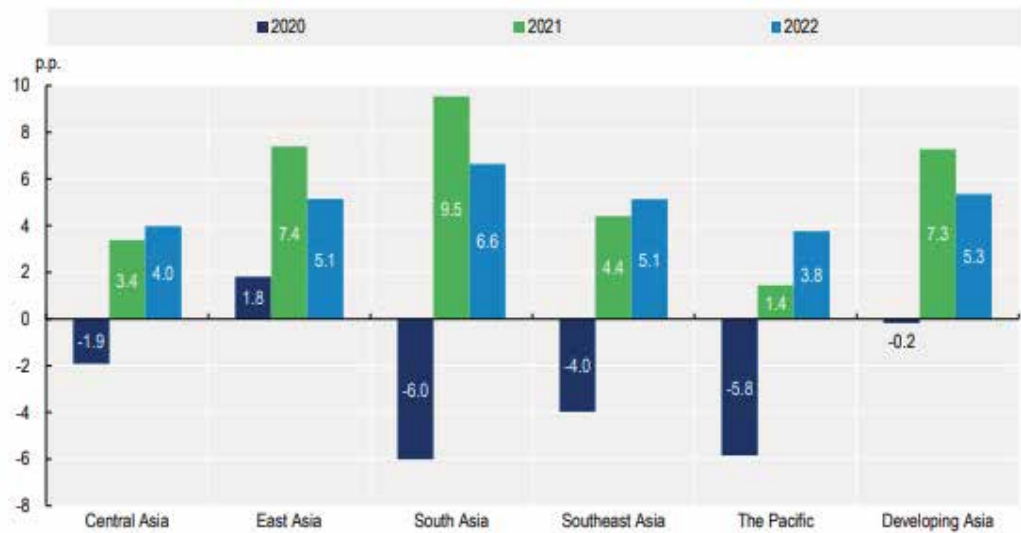
The differences in government revenue and expenditure observed between countries are first and foremost explained by differences in fiscal policy choices, although the extent of the informal economy in a country also plays a role. These choices are partly path-dependent, partly historically determined, and partly the result of the complex interplay between the interests, ideas, institutions, and ideologies prevalent in the country. When you advocate for increased spending for health and nutrition, you will find yourself part of this complex interplay between factors!

Determining and implementing fiscal policy are the legal prerogative of Ministries of Finance. However, health and nutrition stakeholders can engage with the Ministry of Finance about fiscal policy, redistribution, and equity, as these are inherently political and should be determined at a societal level; they are thus not simply a technical matter. Health and nutrition stakeholders should also critically engage with the more technical aspects of the assumptions underpinning what is often portrayed as the only option of fiscally sustainable policy. Indeed, issues such as what levels of sovereign debt are sustainable and whether investments in social sectors should be seen as economically productive with an economic return are open to debate, as the conceptual and empirical grounds for a one-size-fits-all conservative fiscal policy are increasingly being questioned (Roy *et al.*, 2007; Ortiz *et al.*, 2011).

Sub-national governments may also have capacity to expand this corner of the fiscal space diamond by increasing the monies collected through their own revenue sources. These include property tax, fees, and licences; certain business taxes; and occasionally motor vehicle taxes. In some countries, revenues collected by sub-national entities that form part of their budgets can be significant. In this case, determining 'fiscal space for nutrition' involves understanding how much fiscal space is available at the central and sub-national level and what the resource allocation processes are to ensure nutrition programmes are adequately funded. Because of its importance to health and nutrition programmes, we have developed a standalone module for decentralisation (Module 6).

Fiscal revenues have been acutely impacted by the COVID-19 pandemic in many countries. The raising of tax revenues is dependent on the strength and growth of the economy. As economies worldwide saw shrinking, or stagnant, economic growth, the tax revenues of governments declined commensurately. In Asia, the economic blow was greatest in South Asia where GDP growth rates fell to -6% in 2020 (Figure 4). However, Asian Development Bank projections suggest that recovery in South Asia will be rapid, whilst in the Pacific this rebound will be more halting. Even if the tax to GDP ratio in the region remained constant in spite of the COVID-19 pandemic, therefore, government revenues would have been expected to fall across much of Asia in 2020.

Figure 24: GDP growth rates in the Asia and Pacific region, 2020-22.²⁰

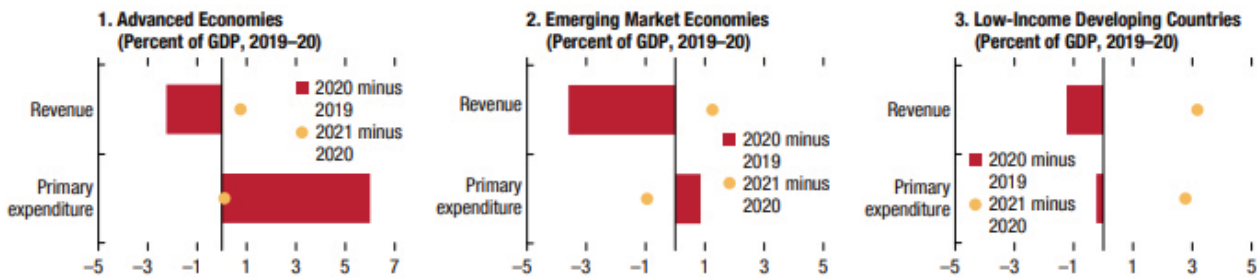


Source: ADB (2021), Asian Development Outlook (April 2021).

Governments also witnessed a relative reduction in their tax raising opportunities owing to COVID-19. The sources of taxation are varied across the region, depending on the size and nature of the economy, as well as the political priorities of governments. Broadly, however, tax to GDP ratios fell in the period. This is because direct tax revenue would likely have declined owing to a rise in unemployment and poor economic growth. Additionally, indirect tax revenue has fallen, owing to falling consumption and demand during the COVID-19 pandemic, other than for those goods and services those deemed 'essential' (which are often tax-exempt).

This fall in government revenue has been felt worldwide (Figure 25). The reduction seems to have been most profound in emerging market economies between 2019 and 2020; however, the IMF projects revenue collection to rebound, and somewhat recover, in 2021. Meanwhile, general government expenditure has increased, putting pressures on budgets. Governments have sought to mitigate the impacts of the pandemic through public spending whilst bearing the burden of falling fiscal revenues, into the medium- to long-term this will result in a reduction in the available fiscal space of most governments.

Figure 25: Change in General Government Expenditure and Revenue (Percent of pre-COVID-19 GDP).²¹



20 OECD (2021). Revenue Statistics in Asia and the Pacific 2021: Emerging Challenges for the Asia-Pacific Region in the COVID-19 era, (Paris, OECD Publishing).

21 International Monetary Fund (2021). Fiscal Monitor: A Fair Shot, (Washington, April), 6.

3.2 Reprioritisation of public expenditure

The amount of public money allocated to a particular social sector varies widely between countries. For example, the domestic general government health expenditure²² as a percentage of GDP differs more than four-fold between Pakistan (0.7%) and Thailand (2.9%) (WHO, 2015). One of the underlying questions is, therefore: is there an objective benchmark that suggests how much should be spent (in absolute terms or as a share of general government revenue) on one particular area? We discussed above that there are four common approaches to answering this question.²³ However, on the whole, there is no ‘right’ level of spending, and each line ministry will have to fight for its share of budget, recognising that the budget formulation process is inherently political.

The implication of the lack of definite enforceable public spending norms is that expenditure may be moved from one budget area to another in a way that increasing the budget for one sector may come at the expense of another sector: this is reprioritisation of public expenditure. Reprioritisation of expenditure can happen between sectors (e.g., from road infrastructure to health) or within sectors (e.g., from hospital care to community care).

Reprioritisation of public spending is often a contentious and politically difficult approach. To be successful, there must be strong political will and a focus on feasibility. Opposition to restructuring obviously stems from the fact that no extra resources are available and, therefore, allocations to other sectors will have to be reduced to allow for increased nutrition investments—these sectors often represent important vested interests in a country. In other words, this approach presumes that the overall

budget is fixed and changes to its structure must obey the rules of a zero-sum game.

This is highly relevant for public nutrition expenditure, a large share of which is subsumed in primary healthcare budgets. Reprioritisation means either that the health budget goes up at the expense of other sector budgets, or that the primary healthcare budget goes up at the expense of other parts of the health budget. Because of the fact that important parts of nutrition are subsumed into integrated health programmes, reprioritisation will often be an important strategy for nutrition stakeholders to ensure that nutrition programmes are adequately funded.

Beyond the nutrition sector, the literature on public choice and public finance describes how different interest groups within and outside government compete to influence public policies and budget allocations. In cases where social sector ministries are not able to garner support, the result may be reduced allocations for social-related investments. Very often, both in developed and developing countries, the debate is manipulated by vested interests and/or ideological posturing—for instance arguing that social expenditures are causing unmanageable deficits while not mentioning military or other non-productive expenditures that are much larger. Various studies have highlighted the risks of pro-poor budget items being the most affected during fiscal consolidation and adjustment. COVID-19 has increased this risk, and nutrition stakeholders will have to be extra-vigilant to avoid budgets being reduced.

3.3 Innovative financing mechanisms

There are a wide range of possible alternative sources of finance. These initiatives are ‘innovative’ in the sense that they can enhance fiscal space in ways other than those commonly considered: increasing tax rates, enlarging the tax base, and improving the efficiency of the tax administration. Ultimately,

innovative sources are contribute to the overall tax pressure on the economy, so from this perspective the distinction between ‘traditional’ and ‘innovative’ sources is less significant. What is relevant, however, is that many innovative financing mechanisms can increase budgetary room in the short term (within the

²² In simple terms, this is the amount of the government’s budget excluding donor funds spent on health.

²³ Political commitments (and their implied investments); comparing spending with benchmark countries; international costing benchmarks; and national costing exercises.

space of 12–36 months), while tax reform often takes years to turn into increased fiscal space. This is a particularly attractive feature of innovative financing mechanisms that can be used in debates around fiscal space with Ministries of Finance.

Looking in more detail at nine commonly considered alternative sources of funding at the country level,²⁴ it appears that the revenue potential varies dramatically from source to source (Lievens, 2012). The same mechanism does not always yield the same level of revenue across countries, as revenue potential also depends on the size of the sector in which the mechanism is applied and, in the case of taxes, on the room to add additional taxes. A qualitative assessment of each alternative source of funding shows, furthermore, that some are more desirable than others. This is the case when the following factors are taken into account: sustainability (or longevity); stability (whether revenue is stable over time); progressivity (or equity in financing);

administrative efficiency; and side-effects (both negative and positive). The overall message is that the introduction of alternative sources of funding must be considered on a case-by-case basis. These sources of funding are often thought of as ways to finance specific purposes, for example an Aids fund (Zimbabwe) or subsidising UHC (Philippines). In the next subsection we turn to hypothecating taxes or levies and earmarked funds, which have attracted a lot of attention in recent years.

More recently, blended finance has been attracting increasing attention as a way to mobilise private capital flows towards investments with development impact. It consists of mixing public and private funds through a common investment vehicle usually supported by technical assistance and/or grant funds to mitigate risks (OECD, n.d.; World Economic Forum, n.d.). Box 7 provides a few examples of such mechanisms.

Box 7 Examples of blended finance

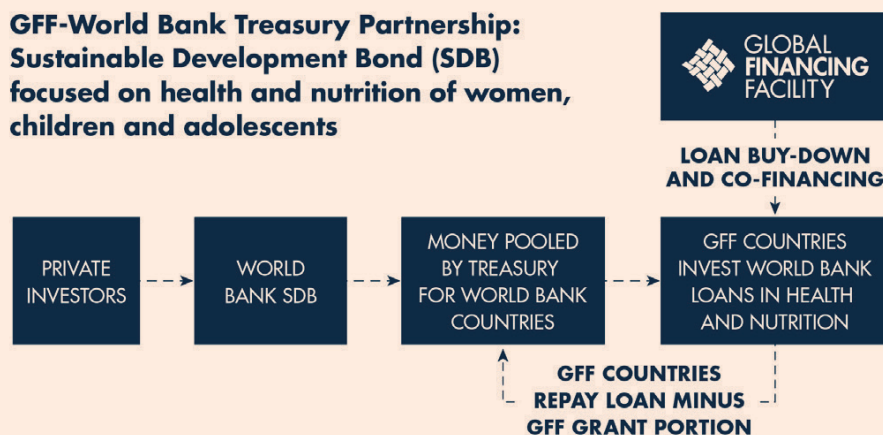
In this box we briefly introduce a few initiatives you may have heard of in the context of ‘blended development financing mechanisms’.

- **Development impact bonds (DIBs):** DIBs provide upfront funding for development programmes by private investors, who are remunerated by donors or host-country governments—and earn a return—if evidence shows that programmes achieve pre-agreed outcomes. If interventions fail, investors lose some or all of their investment. Visit the website of the Centre for Global Development to learn more about it: www.cgdev.org/working-group/development-impact-bond-working-group.
- **The Global Financing Facility (GFF):** the GFF, launched in July 2015, is a mechanism that aims to use modest amounts of grant resources catalytically, bringing programs to scale by leveraging far greater sums of domestic government resources, the World Bank Group’s International Development Association and International Bank for Reconstruction and Development financing, aligned external financing, and resources from the private sector. The GFF process supports countries to identify an evidence-based set of priority investments in health and nutrition to help ‘bend the curve’ to accelerate progress and get on a trajectory towards achieving the SDGs.

In Asia, GFF recipient countries include Afghanistan, Bangladesh, Cambodia, Myanmar, Indonesia, and Vietnam.

24 Public sector mainstreaming; mandatory contributions from private companies; levies on air passenger traffic (airline levies); the mobile phone industry (airtime); alcohol; remittances; tourism; lotteries; and the returns on investment from dormant funds (unclaimed assets).

**GFF-World Bank Treasury Partnership:
Sustainable Development Bond (SDB)
focused on health and nutrition of women,
children and adolescents**



Visit the website of GFF to learn more about it: www.globalfinancingfacility.org/.

- **The Global Innovation Fund (GIF):** the GIF is a hybrid investment fund that supports the piloting, rigorous testing, and scaling of innovations targeted at improving the lives of the poorest people in developing countries. Launched in 2014 through grants, loans (including convertible debt), and equity investments ranging from US \$50,000 to US \$15 million, the GIF backs innovations with the potential for social impact at a large scale. Visit the website of the GIF to learn more about it: <https://globalinnovation.fund/>.
- **Power of Nutrition:** Established in 2015, Power of Nutrition is a platform for mobilising funds for high impact nutrition interventions by leveraging financing and partnerships between the private sector, governments, and donors. Every dollar that is invested in Power of Nutrition is doubled by the platform, and then doubled again by the programme implementing partners (UNICEF and the World Bank). In this way, the original funds are quadrupled. Power of Nutrition invests in countries with the highest burden of stunting, i.e. where stunting rates are 30% or more and at least 250,000 children are stunted. Currently, there are investments in 11 countries, including India and Indonesia in Asia. To learn more about Power of Nutrition, visit: www.powerofnutrition.org/.

Source: Centre for Global Development (n.d.); GFF (2017); Global Partnership for Education (2018); GIF (2020); Power of Nutrition (n.d.)

3.4 Earmarked funds

Ministries of Finance often take the view that earmarking revenue for a particular sector is bad practice. This is because conventional approaches to public finance generally deal separately with revenue and spending decisions. Revenue is earned from taxation (i.e. income tax, VAT, customs duties, etc.) and paid into a consolidated fund, from which spending is financed according to decisions and priorities set by the government and approved by the parliament, reflecting the wishes of the electorate (the taxpayers) and priorities of the day. Under this approach, taxes are not generally levied for the funding of specific activities, nor are decisions regarding the allocation of resources to specific programmes separated from the overall public spending decisions.

In addition to general revenue, governments often raise finances through user charges/levies and earmarked taxes.

User charges are levied on users and reflect the full or partial cost of providing a public service (such as the issuing of driving licences, passes for entry to national parks, consultation fees, etc.). Revenue raised from these sources is sometimes retained by the agency that raises the revenue or transferred to the general consolidated fund. In revenue generation through user charges, there is often a clear link between the incidence of the levy and the beneficiaries, such as when a toll fee is paid into a fund reserved for the construction or maintenance of roads. This is an example of the 'benefits principle' whereby the fee is paid by those who benefit most from the expenditure.

Earmarked taxes are charged for the purpose of financing a specific activity or programme. Sometimes earmarked taxes follow the benefits principle and are similar to user fees in that they are charged on the activities for which they are earmarked (e.g. a fuel levy). Sometimes, however, they are charged on activities that have little or no relation to the activity for which they are intended.

Sugar taxes have gained prominence in the last couple of years. Probably the most noticeable example is Mexico, which faced rapidly deteriorating nutrition outcomes: in 2012, 35% of children and 71% of adults were overweight or obese. At the same time, Mexico ranked first in the Americas for intake of sugar-sweetened beverages—163 litres/*capita*/year. Before

the introduction of the tax, modelling was done to understand the elasticity of the tax. It was found that demand for sweetened-drinks is 'elastic', meaning that a price increase, through adding a tax on top of the retail price, would bring down consumption while at the same time raising revenue for the government. In terms of equity, it was found that for lower-income households (which had the highest prevalence of overweight in the country) the demand for soft drinks was most price elastic and that therefore the tax would curtail intake of soft drinks among them more compared to other socioeconomic groups.

In 2013, a special tax on Production and Services was levied on soft drinks and other sugar-sweetened beverages of 1 peso per litre (or 10%) and a tax of 8% was imposed on high-calorie foods (275 kcal per 100g) such as snacks, chocolates, and confectionery products. Along with the tax, the Mexican government introduced a national campaign promoting healthy dietary habits. However, the introduction of the tax faced several challenges, including strong opposition from the soft drink industry in the form of activism in the media; they got influential individuals and health professionals to argue against the tax, focusing on the negative impacts on society through the industry's lost revenues and the resulting dismissal of staff. Notwithstanding this opposition, the purchase of sugar-sweetened beverages in the year following the imposition of the tax decreased by 7.6% (Pan-American Health Organization, 2015).

In Asia, the Philippines introduced a sugar tax in 2018 following other 'sin taxes' on tobacco and alcohol introduced in 2012. The tax, a preventative measure against obesity and for oral health, consisted of 6 Philippine pesos per litre for beverages sweetened with caloric or non-caloric sweeteners and 12 Philippine pesos per litre for beverages sweetened with high-fructose corn syrup. As a result of the tax, the price of sweetened beverages increased by 17%–21%. As with the tobacco and alcohol taxes, the tax on sugar-sweetened beverages in Philippines had a soft earmark for funds for the UHC programme, PhilHealth. In Asia, other countries such as Indonesia, Malaysia, Singapore, and Vietnam are also considering introducing sugar taxes (Onagan et al., 2019).

While sin taxes have gained prominence, earmarking them to specific areas has been and is being resisted. The main public finance arguments against earmarked taxes and levies are as follows: they may lead to inefficient allocation of resources by removing spending decisions from broader public resource allocation processes; they introduce additional distortions into economic decision making; and they may undermine parliamentary/democratic control of public finances. International best practice regarding public financial management and taxation favours taxes being paid into the general (consolidated) fund, with specific spending allocations being made as part of the general public finance process.

However, earmarking tax revenue also plays an important role in ensuring the political acceptability of additional taxes and levies. This is particularly the case where the tax revenues are put towards a clearly defined social benefit. That is why revenues from the sugar tax are earmarked in the UK for spending on child obesity prevention programmes such as school sports programmes and breakfast clubs; in the Philippines, earmarked taxes on alcohol and tobacco are used help achieve UHC through subsidised insurance coverage for the poor; and in Vietnam, a compulsory contribution by the tobacco industry of 1 % of cigarette factory prices is earmarked for tobacco control health services.

Box 8 COVID-19 and Innovative Financing for Nutrition²⁵

The drastic impacts that the COVID-19 pandemic has wrought on health systems and economies worldwide has been widely recognised around the world. Providing basic sustenance for the world's poorest has been a significant challenge throughout the pandemic, with absolute and relative need being pushed higher in the wake of the pandemic.

COVID-19 is expected to have pushed 135 million additional people into acute food insecurity, with 34 million people now at risk of famine. Years of progress are threatened – with projections suggesting that on top of the 149 million children who are already stunted today, an additional 9.3 million children will suffer acute malnutrition and 2.6 million will be stunted by 2022.

In response to these challenges, financing for nutrition is more important than ever. However, concurrently, we are witnessing ODA and domestic resources become increasingly constrained. International actors, such as the World Bank, are calling for innovative financing instruments to be used to crowd-in non-traditional financing sources.

Efforts towards this have been very varied. The World Food Programme's Headquarters Nutrition Division has now introduced a team dedicated to innovative financing, with the aim of attracting new public and private investment to supporting coordinated nutrition action. Their first project has included partnering with the Islamic Development Bank to launch a performance-based investment instrument to support critical nutrition programmes in the first 1,000 days of life.

At country level, initiatives include experimentation with taxes on unhealthy foods, whilst in Mexico, the government has created Sustainable Development Goal bonds which they are selling for up to US\$15 billion per year to support their nutrition initiatives.

25 M. Shekar et al. (2021). 'Financing SDG2: Hunger and malnutrition – what will it take?', World Bank Blogs, published 28 April 2021. Available at <<https://blogs.worldbank.org/voices/financing-sdg2-hunger-and-malnutrition-what-will-it-take>>. Innovation Accelerator (2021). 'From innovative finance to nutrition, eight innovation teams will be challenged to tackle world hunger and advance global equity', World Food Programme. Available at <<https://wfpinnovation.medium.com/from-innovative-finance-to-nutrition-eight-innovation-teams-will-be-challenged-to-tackle-world-c780a91afbea>>.

4. Official development assistance

ODA, allocated to specific sectors or to the general government budget, could represent an additional source of revenue for the state to further its nutrition goals.²⁶

Aid can be under the form of general budget support, leaving large degrees of freedom to the government to allocate the money as it wishes. It can be given to sectoral budgets, for example the health and nutrition budget, again giving relative freedom to the government (within health and nutrition in this case) to allocate resources. Alternatively, aid can be given for the support of specific projects, such as maternal, new-born, and child health.

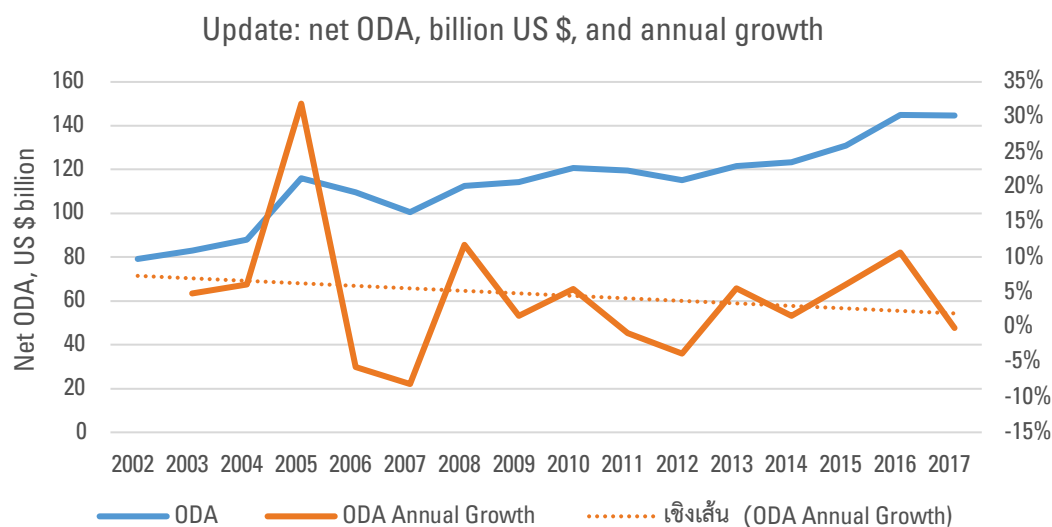
1. **Budget support:** this is when funds are provided directly to a partner government to be spent within that government's own systems. The ODA contributions can be made to the overall national budget (general budget support) or earmarked for a specific sector (sector budget support).
2. **Pooled or basket funds:** these are funds to cover specific budget lines within sectors and managed externally through a multi-donor trust fund or a designated government account separate from the main government account used for the allocation of budgetary funds.

3. **Projects:** specific activities in which donors' resources are used at a defined time and place, usually outside the government's systems.

The choice of aid modality has implications for the effectiveness, accountability, and flexibility of governments to manage the funds in line with their country systems. Despite shifting trends (for example, aid fatigue in the 1990s), there has in general been a significant and systematic increase in the number of official donors, non-governmental organisations, and recipient countries. The COVID-19 crisis, which significantly impacts fiscal space of rich and low-and-middle income countries alike, is like going to impact the nature and volume of ODA.

The total amount of aid increased significantly over the years from 2002 to 2017, rising to over US \$140 billion in 2016. However, over the same period, the rate of ODA growth declined, although it did so following an erratic pattern. Annual growth of ODA fell well below zero in 2006 and 2007 and again in 2012 (well into the economic crisis that followed the financial crash of 2008), with a trajectory suggesting aid is now slowly declining year on year. Figure 26 shows this.

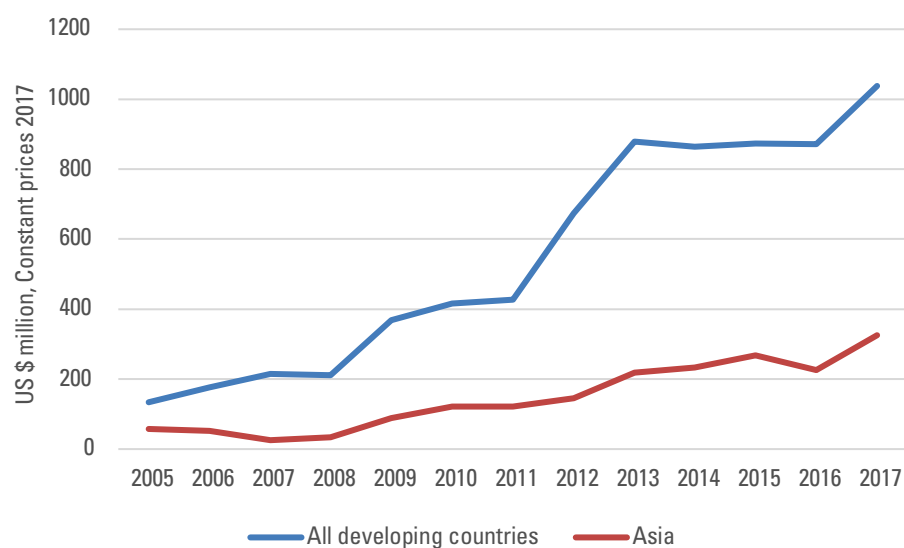
²⁶ In this course, we will not delve into the detailed features of each aid modality and their impacts on effectiveness. However, we encourage you to read Glennie and Hurley (2014), which provides an overview of recent aid flows and discusses the implications for new development thinking.

Figure 26: Trends in ODA

Source: Organisation for Economic Co-operation and Development (OECD) (2019) and authors' own calculations. Net ODA shows aid disbursements to all countries and regions, minus repayments of the principal on loans from prior years

Figure 27 shows OECD Development Assistance Committee (DAC) data for ODA 'basic nutrition', which is commonly used as a proxy for ODA for nutrition interventions, in particular those delivered through the health sector. Total ODA for nutrition peaked in

2013 and then stabilised with an increase in 2017. The lion's share of ODA for basic nutrition (54% in 2017), goes to sub-Saharan Africa; Asia received 31%. Whether ODA is an important source of funding for nutrition is country specific.

Figure 27: Trends in ODA disbursements to basic nutrition

Source: OECD statistics

The 'basic nutrition' code in OECD DAC data measures aid to the following interventions:

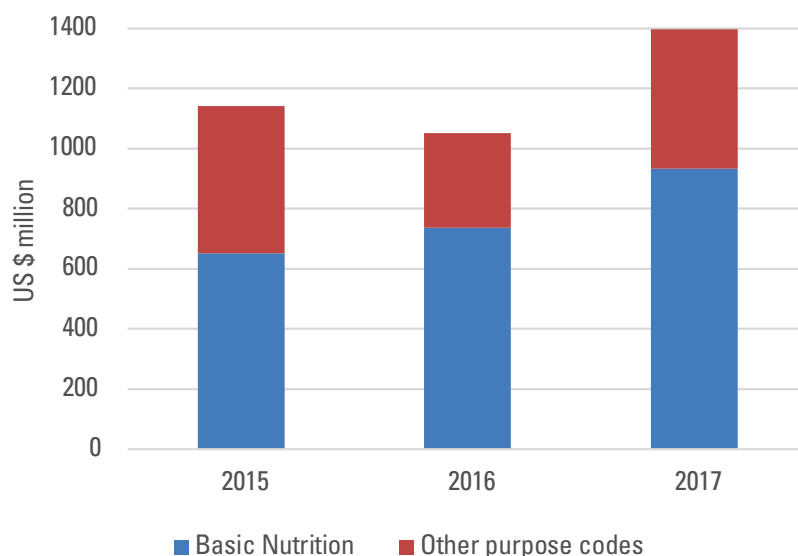
- direct feeding programmes such as maternal feeding, breastfeeding and weaning foods, child feeding, school feeding (till 2016);
- determination of micro-nutrient deficiencies;
- provision of vitamin A, iodine, iron, etc.;
- monitoring of nutritional status;
- nutrition and food hygiene education; and
- household food security (Global Nutrition Report, 2018).

The 'basic nutrition' code is the closest proxy for measuring aid for nutrition interventions in the health sector. However, it is imperfect and does not fully capture total aid on these interventions: about 35%

of total aid on nutrition falls under other DAC purpose codes due to the integrated nature of spending (Results for Development, 2019). The 'basic nutrition' code also contains interventions that are not delivered by the health sector, such as interventions related to household food security or biofortification and (until 2016) school feeding.

Improvements have been made in tracking spending on the package of interventions proposed by the World Bank investment framework (Results for Development, 2019). Figure 6 shows disbursements on activities related to the World Bank package of interventions from 2015 to 2017. While there was a fall in aid from 2015 to 2016, there was an upward movement in 2017. It should be noted here that the World Bank package of interventions includes staple food fortification, a nutrition intervention that is not delivered by the health sector.

Figure 28: WHA targets aligned disbursements



Source: Reproduced from Results for Development (2019)

There is an expectation that aid will decrease in the coming decade, particularly for middle-income countries, and the rhetoric regarding aid has shifted from a focus on the SDG to the drivers of economic growth.

There are also a host of problems associated with ODA, such as transaction costs, predictability, macroeconomic impacts (including 'Dutch disease'),²⁷ tied aid, lack of policy coherence, fungibility, and conditionality (Ortiz et al., 2011), all of which will manifest themselves differently across countries.

²⁷ 'Dutch disease' is the negative impact on an economy of anything that gives rise to a sharp inflow of foreign currency, such as ODA or the discovery of natural resources. The currency inflows lead to currency appreciation, making the country's other products less price competitive on the export market.

Precisely predicting how much aid any given country will receive beyond a window of three years, let alone which sectors it will be directed to, is next to impossible. For nutrition stakeholders this implies that a country-by-country analysis is required to understand the contribution of aid to fiscal space for nutrition against a background of global trends, decreasing ODA and aid for basic nutrition, and aid increasingly being targeted away from middle-income countries and towards economic (as compared to social) sectors, to understand the challenges that typically come with aid.

Sub-national governments often also receive ODA, so a fiscal space analysis at this level could in principle also explore this corner of the diamond. However, aid effectiveness principles require ODA to be centrally overseen at the national level to avoid fragmentation and to avoid losing the holistic view of funding available to deliver public services.

More recently, Disbursement Linked Indicators (DLIs) have been more commonly used. DLIs are an aid instrument that incentivises governments to achieve results from a donor-funded programme. DLIs, often used by the World Bank, are similar to Programme for Results grant or lending mechanisms that finance outputs or outcomes rather than inputs—disbursements are based on achieving predetermined targets or results. The rationale behind this form of aid is to allow for more flexibility in implementation and to ensure greater ownership and sustainability, enhancing accountability for achieving results and therefore the likelihood of achieving those results.

An example of a DLI-based programme is the World Bank Governance and nutrition development project in Laos, which seeks to strengthen the health system

and improve health system outputs. DLIs used in this project include:

- the number of women who deliver with a skilled birth attendant;
- the number of pregnant women receiving four antenatal care visits;
- the number of women aged 15 to 49 who have adopted long-term methods of family planning; and
- the percentage of children aged 0–6 months who are exclusively breastfed.

Another example is the World Bank Bangladesh Health Sector Support Project, the objective of which is to strengthen the health, nutrition, and population (HNP) sector's core management systems and delivery of essential HNP services with a focus on selected geographical areas (Sylhet and Chittagong) (World Bank, 2017). UNICEF engaged with the World Bank to include two nutrition-related indicators in this health sector project:

- DL13: maternal nutrition services are expanded as measured by the percentage of registered pregnant mothers receiving specified maternal nutrition services; and
- DL14: infant and child nutrition services are expanded as shown in, for example, the percentage of registered infants and children aged under two receiving specified nutrition services.

These examples show that DLIs can be a useful instrument for advancing nutrition investments and outputs. DLIs have also been used to leverage an increase in government expenditure for nutrition programmes.

Box 9 COVID-19 and ODA²⁸

The COVID-19 pandemic is having a profound impact on ODA flows. The dual impact of the pandemic, on economies and health sectors, has been felt worldwide, affecting low- and high-income countries alike. With recession, low growth, and depressed fiscal space becoming a reality for many high-income donor countries, such as the USA, Germany, and the United Kingdom, forecasters predicted from the outset of the pandemic that it would likely trigger a reduction in both the absolute and relative flows of ODA.

Since 2016, ODA has already been stagnating and levelling-off; however, 2020 marked a rupture in ODA trends, witnessing a marked decline in commitments from bilateral donors. Between 2019 and 2020, ODA commitments from bilateral donors fell by 26% and, amongst some of the world's largest bilateral donors, the fall in aid was even more dramatic. The UK, for example, witnessed ODA commitments almost halve between 2019 and 2020, whilst in the US they dropped by 50%.

Yet, in the same period, aid flows from international financial institutions (IFIs) increased by 189%. Notably, the Asian Development Bank (ADB) increased its commitments by a factor 6.9, whilst the World Bank surpassed the US to become the single most important donor by aid commitments, at US\$ 31,989 million in 2020. Whilst this is positive, in the long-term it is likely that this increase will be unsustainable, without substantial new contributions from countries to support this spending. Further, it is interesting to note that aid commitments made by both UNICEF and the World Food Programme did not follow this trend (with UNICEF's aid commitments between 2019 to 2020 actually falling by US\$8 million and the WFP only witnessing an incremental increase).

28 A. Dodd et al. (2021). Aid data 2019-2020: Analysis of trends before and during COVID, (Development Initiatives, Briefing). Available online at <<https://devinit.org/resources/aid-data-2019-2020-analysis-trends-before-during-covid/>>. S. Brown (2021). 'The impact of COVID-19 on development assistance', International Journal: Canada's Journal of Global Policy Analysis, 76:1, 42-54.

5. Borrowing

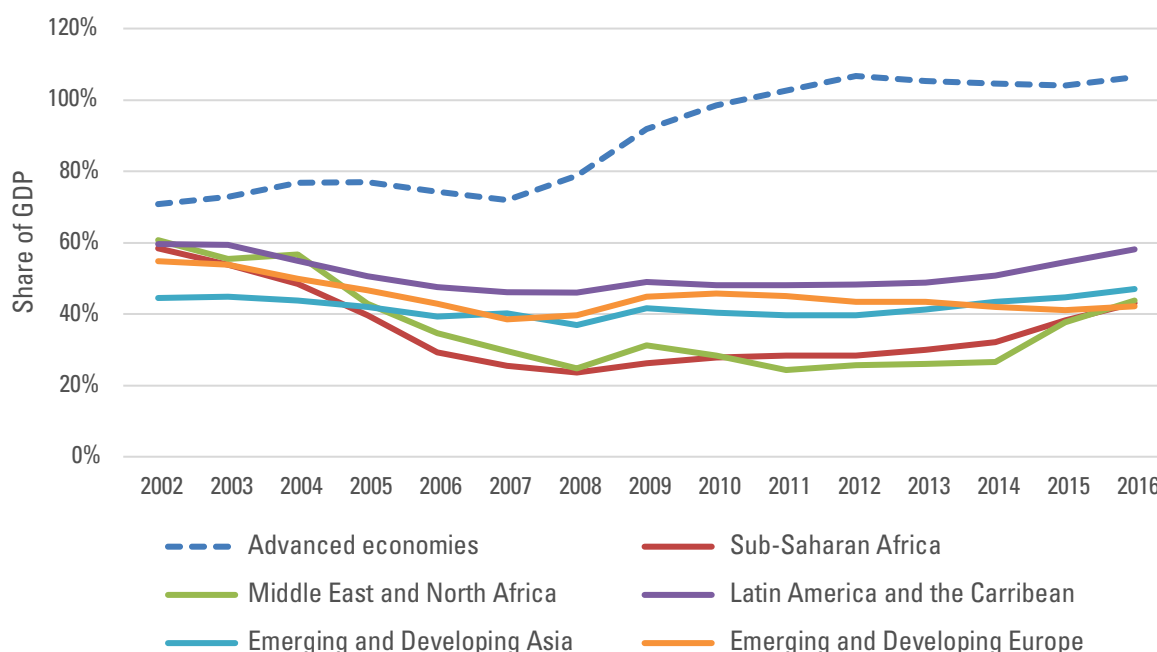
Borrowing provides the government with additional early resources, while constraining its later resources through interest payments and as loans are repaid. For this reason, borrowing changes the availability of fiscal space over time. High rates of borrowing to finance a government's regular operations are generally not advised. An increasing level of debt servicing would progressively erode the government's financial resources and high levels of government spending would eventually become unsustainable.

What is an acceptable level of borrowing? This, of course, is a matter of debate. In practice, debt sustainability depends on a number of factors. The IMF uses a 40% long-term debt-to-GDP ratio as the ceiling developing countries should not exceed to ensure fiscal sustainability and macroeconomic stability. Others suggest a higher threshold (e.g. 60%: Reinhart and Rogoff, 2010). Yet another approach is to view an optimal debt-to-GDP ratio as

arbitrary, since public debt can be beneficial over the long term if interest payments are less than the annual increase in nominal GDP (UNCTAD, 2011). Globally, countries have heavily borrowed to finance Covid-19-policy responses, and what constitutes 'sustainable levels of borrowing' is in all likelihood going to be subject to debate in the coming years.

However, the 40% ceiling for LMICs is seen by the IMF itself as nothing more than a useful benchmark, and it believes that going beyond this ratio does not in any way imply a fiscal crisis (quoted in McIntyre and Meheus, 2014). Indeed, as illustrated by Figure 27, the average debt-to-GDP ratio for low-income countries is much lower than for advanced economies. While other factors (such as the cost of borrowing to LMICs, any grace period—the period of delayed repayment—that can be obtained, and so on) will play a role, a summary conclusion could be that some LMICs do have a margin Ministries of Finance could choose to create fiscal space.

Figure 29: Government gross debt as a percentage of GDP



Source: IMF DataMapper (2018) and author's own calculations

In some countries, governments at the sub-national level may be allowed to borrow under certain conditions (e.g. if they meet a certain rating),

although it is not uncommon for borrowing only to happen through the central government.

5.1 Is borrowing really an option for low-income countries?

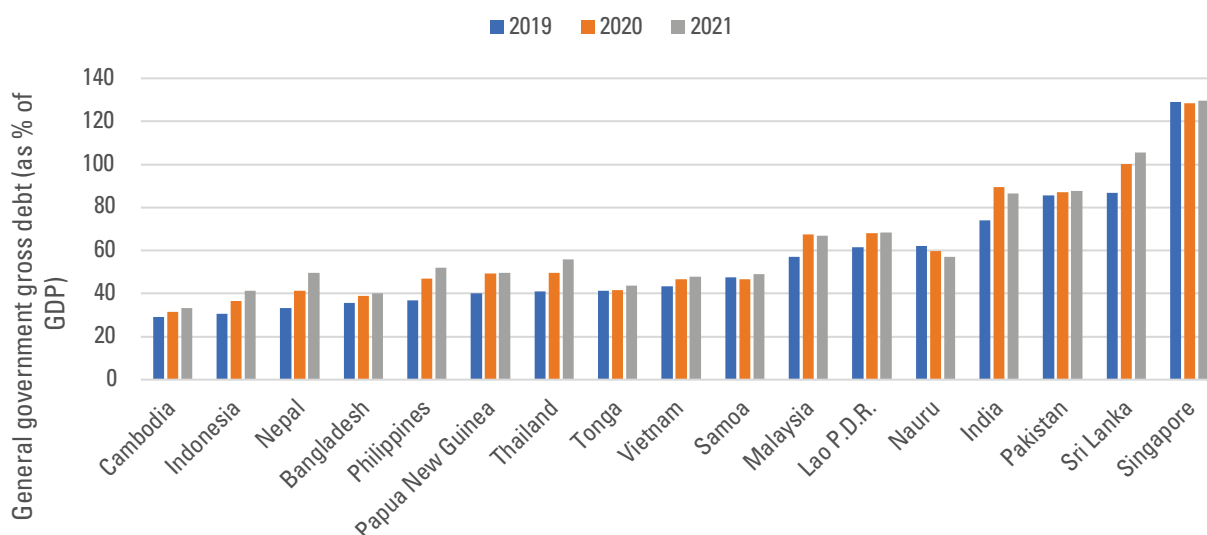
Following the development of local financial markets and the recognition of LMICs as a destination for international investment, borrowing has become a financial instrument open to many low and middle-income governments. Borrowing can take a number of forms, including loans from commercial banks or development banks, and government bonds. Commercial bank loans are often more expensive, making concessional loans from development banks or funds generally the preferred option (Ortiz *et al.*, 2011).

It is also increasingly common for governments to borrow at the sub-national level. South Africa is one example where sub-national bonds have generated greater social investments. Today, municipal bonds are issued by city councils for development projects

with tenors typically longer than one year; municipal bond issues are not guaranteed by the central government. Other countries are now following suit, with municipal bonds recently issued to finance urban infrastructure.

The impact of COVID-19 on the economy, and subsequently on fiscal space, has been offset in part by incurring debt, bringing debt-to-GDP levels to unprecedented heights in some countries. Figure 10 illustrates the growth in general government gross debt (measured as a percentage of GDP) across a selection of countries in the Asia and Pacific region. This situation now means that many countries within the region are now at risk of external and overall debt distress (Table 12).

Figure 30: General government gross debt, as a percentage of GDP in countries across the Asia and the Pacific region, 2019-2021.²⁹



29 International Monetary Fund (2021). World Economic Outlook Database, available April 2021. Accessed <https://www.imf.org/en/Publications/WEO/weo-database/2021/April/weo-report?c=512,314,193,912,513,514,516,522,924,532,534,536,429,433,158,439,916,542,443,917,544,446,546,548,868,948,836,558,196,449,564,565,853,-566,453,862,456,576,524,463,528,923,578,537,866,186,925,869,466,927,846,582,487,474,&s=GGXWDG,GGXWDG_NGDP&sy=2019&ey=2026&ssm=0&scsm=1&ssc=0&ssd=1&ssc=0&sic=0&sort=country&ds=.&br=1>

Table 12: Level of debt distress in selected countries of the Asia and Pacific Region³⁰

Country	External debt distress	Overall debt distress
Afghanistan	High	High
Bangladesh	Low	Low
Bhutan	Moderate	Unknown
Cambodia	Low	Low
Lao P.D.R.	High	High
Micronesia	High	High
Myanmar	Low	Low
Nepal	Low	Low
Papua New Guinea	High	High
Samoa	High	High
Tajikistan	High	High
Timor-Leste	Low	Low
Tonga	Moderate	High
Tuvalu	High	Unknown
Uzbekistan	Low	Low
Vanuatu	Moderate	Moderate

30 World Bank (2021) 'COVID-19: Debt Service Suspension Initiative', World Bank, published 31 August. Available at <<https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative>>.

6. Efficiency savings

Simply defined, 'inefficiency' refers to a failure to fully exploit available resources. At the most basic level, efficiency gains can be thought of as achieving one of two things:

1. better outputs for the same level of investment; or
2. the same outputs at a reduced level of investment.

While efficiency gains may reduce the costs of service delivery, the objective is to contain costs without reducing outputs. Efficiency, therefore, includes a measure of both the quality and the quantity of outputs (i.e. number of children receiving vitamin A supplementation) for a given level of input (i.e. cost of programme for vitamin A supplementation) and is not simply about 'cutting costs'. More often it is about making better use of existing resources so as to expanding coverage of and access to social services. Efforts to improve efficiency should therefore be considered to increase the domestic resources available for child-centred spending. This is how efficiency savings relate to fiscal space.

Efforts to improve efficiency can take one of two forms: improving the allocation of resources so that interventions have maximum effect (termed *allocative efficiency*), and improvements that optimise implementation so that interventions are implemented at the lowest possible cost (termed *technical efficiency*).

Simply put, allocative efficiency is about the mix of interventions that produce maximum output. The balance between spending on preventative and curative care, both of which aim to improve the health of the population, is an example of allocative efficiency. Once that balance has been determined, the question becomes: 'How to implement a preventative/curative care programme at the lowest cost?' This is what technical efficiency is about. Nutrition interventions delivered through the health system are typically very cost-effective and should therefore be the priority targets for public expenditure. This is the case made by nutrition investment cases, which are discussed in more detail in Module 8.

However, not all nutrition expenditure is equally effective, and the allocative efficiency of the nutrition sector can be improved by changing the within-sector allocation of nutrition. For example, an analysis of nutrition spending in Indonesia shows that the country's total spending on nutrition, estimated at US \$3.9 billion for nutrition spending in all sectors (including health), is comparable on a per capita basis to similar LMICs. However, this money is not spent efficiently: 90% of the national Ministry of Health's Nutrition budget in 2017 was spent on treatment in the form of food supplements for undernourished pregnant women and children under five, targeting a small proportion of the population rather than prevention of stunting. A very small proportion of funds are focused on preventative programmes such as counselling to encourage breastfeeding and adequate complementary feeding of infants (Rokx *et al.*, 2018). The allocative efficiency of Indonesia's nutrition spending could be improved by shifting spending towards prevention and away from treatment.

To the extent that efficiency gains are possible at the sub-national level, then sub-national governments may also have the capacity to expand this corner of the fiscal space diamond.

Efficiency savings imply producing the same outputs with fewer resources (greater technical efficiency), which could free up financial resources, and hence increase fiscal space. For example, the same health outcomes could be bought at a much cheaper price by purchasing generic drugs rather than branded ones.

Translating potential theoretical gains into real efficiency savings is, however, a complex exercise that requires in-depth analysis of the system of interest. In health, for example, 10 of the most common causes of inefficiencies have been identified by the World Health Organization (WHO) (2010) (Box 10). Most of these suggest that complex system-wide reforms are required to make health system more efficient, and in that way to create fiscal space.

Box 10 Efficiency savings

The WHO published the following list of the 10 leading sources of inefficiencies in the health sector.

- **Medicines:**
 1. underuse of generics, higher than necessary prices;
 2. inappropriate or ineffective use; and
 3. use of substandard and counterfeit medicines.
- **Products and services:**
 4. oversupply and overuse of equipment, investigations, procedures.
- **Interventions:**
 5. inefficient mix or inappropriate level of strategies.
- **Services:**
 6. medical errors, poor quality;
 7. inappropriate hospital size (low use of infrastructure); and
 8. inappropriate hospital admissions and length of stay.
- **Health workers:**
 9. inappropriate or costly staff mix, unmotivated workers.
- **Leakages:**
 10. waste, corruption, fraud.

Source: WHO (2010) Chapter 4

Achieving efficiency savings in practice is complex. It is also notoriously difficult, and probably impossible with any level of accuracy, to estimate how much fiscal space can be freed up across a social service delivery system. Below are two examples of areas of inefficiency in the nutrition sector that demonstrate the complexity that is often involved.

Efficiency: cost-efficiency of imported versus local Ready-to-Use Therapeutic Foods (RUTF) in Vietnam.

Local production of RUTF is found to be more costly than offshore production (Segrè et al., 2017). For example, the cost of locally producing RUTF in Vietnam (US \$160 per treatment of one child) is about three times that of importing products from the international market (US \$ 54 per treatment of one child) (figure from UNICEF). This high cost is due to the high excise duty for the imported ingredients that are used in the production of RUTF and the low volume of production due to the low demand, as acute malnutrition treatment programmes are not yet scaled up in Vietnam. UNICEF are able to import RUTF in several countries without having to pay import duties. Additionally, in some countries, quality assurance of local production drives up the cost of the nutrition programme. At the same time, other

considerations are at play. For example, local production is necessary to ensure that countries can sustainably prevent and treat, and move toward self-sufficiency (Segrè *et al.*, 2017).

Efficiency: procurement at local levels in Nepal. Under the recent decentralisation in Nepal in 2017, the local governments (*palikas*) were given responsibility for the delivery of basic healthcare services, including procurement of medical supplies and essential medicines. While decentralisation allows for more procurement to be based on and responsive to local needs, a *palika* is a small unit, and there are 753 of them in total. This has given rise to procurement challenges and increased inefficiency for two reasons: centralised procurement leads to economies of scale that are lost when each *palika* carries out its own procurements, and the *palikas* have limited procurement capacity (Thapa *et al.*, 2019).

The four corners of the fiscal space diamond focus on the role of the public sector in increasing budgetary room. However, the private sector also plays an important role in the financing and delivery of public services.

7. The role of the private sector

There are important advantages in private sector involvement in the financing and provision of social services, such as increasing capacity, providing services where public provision is absent, and reducing the burden on the public sector. Public expenditure should therefore first and foremost be directed to financing those social services the private market will not provide or will provide too little of—in other words, where there are market failures that suggest government intervention will produce superior outcomes. Market failures are often prevalent in social sectors, not least because of issues with asymmetric information (where providers have information that users do not have and vice versa, and exploit that information to their benefit, a phenomenon which explains the at-scale development of voluntary community-based health insurance, for example) or externalities (public health benefits from high vaccination coverage are a case in point). The nature of the market failure will indicate the scope for private financing and delivery and therefore the form that government intervention should take, which can range from regulation, financing, or (targeted) subsidies to increased access or outright public provision. As such, the private sector tends to contribute in important ways to financing and providing social services. While it doesn't create fiscal space as such and is not part of the fiscal space diamond, it is a factor in determining the size of fiscal space a government may seek to create to ensure its population has access to essential social services.

Private sector involvement, however, can also introduce inefficiencies and therefore be a source of fiscal space destruction. This is, for example, the case in the health sector in the United States. The merits and risks of engaging the private sector in the financing and provision of social services need to be carefully assessed on a case-by-case basis. One particularly important factor is whether the government has the capacity to regulate the private sector.

Public–Private Partnerships (PPPs) are a particular form of private sector engagement and in some instances can be seen as a mechanism to increase fiscal space, as they crowd-in financing from the private sector and free up budgetary room.

As COVID-19 has put additional pressure on national budgets, there is a risk that some governments will seek to 'off-load' expenditure to the private sector. This means that some nutrition services that were previously supplied by public health centres for free, will now be left to be offered by private health providers on a commercial basis. This will decrease the uptake of these services, especially by the poorer households.

There is no single definition of a PPP. The World Bank PPP Knowledge Hub defines it as a long-term contract between a private party and a government entity to provide a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance. This means that the public sector and the private sector get together to deliver services to the public—these can be infrastructure but can also be social services. A key feature of a PPP is that it has a long-term horizon. It can take many contract forms and depends on three broad parameters:

- the type of asset involved (for example, health centres);
- the functions the private party is responsible for (e.g. to design, to build and rehabilitate, to finance, to maintain, or to operate); and
- how the private party is paid (e.g. by collecting fees from service users, by the government, or by a combination of the two). The payment mechanism should be structured in such a way that the net remuneration of the private party is linked to performance. This means that the remuneration of the private party (net of costs) should increase when the quantity and quality of the delivered services increases.

The World Bank Global Finance Facility provides some good examples of working with private health providers. For example, performance-based financing of private health facilities has been used to give accurate nutrition education to clients and provide quality nutrition services, or to provide more nutrition advice during antenatal visits. The GFF also engages with private sector organisations to provide workplace nutrition programmes or have policies that enable exclusive breastfeeding and improve childcare (e.g.

maternity leave, breastfeeding breaks, etc.).

The evidence of the effectiveness of PPPs is mixed. If

they are poorly designed and managed, they can be more costly than direct public sector investment and management.

8. Concluding remarks

In this module we have learned about the concept of fiscal space, which is often discussed in the context of increasing funds for health and nutrition. We have looked at the sources from which the government can obtain the money (resources) to finance its own expenditures and highlighted the lack of consensus about what constitutes 'sustainable' macro-fiscal management: some emphasise the need for short-term fiscal balance, while others point to the long-term effects of investing in human development.

We have discussed the need to 'claim' fiscal space for nutrition, i.e., to translate existing fiscal space into budgetary allocations for nutrition. To argue the case, nutrition stakeholders can build on political commitments to end malnutrition and national and international costing benchmarks. Comparing how much is spent on nutrition in similar countries is also a good approach.

Using the fiscal space diamond, we have reviewed each of the four pathways to increase budgetary room. We have seen that the evidence shows that the higher the GDP per capita in a country, the higher its ability to increase government revenues, i.e. the revenues versus GDP ratio. We have looked at the ODA trends and seen how, although these continue to increase, they are doing so at a decreasing rate (i.e., the ODA rate of growth is getting smaller). As has been seen, there is an expectation that aid will decrease in the next decade.

We have also seen that, when tax revenues and international aid is not sufficient, the government can consider borrowing, but a much more realistic and necessary solution is to search within its system to find efficiency gains. There is, of course, a debate about what constitutes a sustainable level of borrowing, and when it might be suitable to increase borrowing. Regarding efficiency gains, while such gains are always mentioned as a source of additional budgetary room, in practice they can take years to

materialise as they can require in-depth reforms in a particular sector.

Further, we have looked at the impact that the COVID-19 pandemic is having on fiscal space and budgetary room for nutrition. This included an analysis of how COVID-19 has reduced fiscal revenues, triggered a decline in bilateral ODA, as well as an increase in debt commitments. In this concerning context, understanding the options available for increasing fiscal space is essential, as is the need to drive efficiency savings and look for innovative ways to mobilise alternative methods of funding, should domestic or external sources be insufficient.

We have seen how the four pathways present possibilities but also have limitations. We then discussed in brief the role of the private sector in nutrition financing which offers opportunities which, however, need to be assessed carefully to avoid being more costly than direct public investment.

As many of the nutrition interventions delivered through the health sector are part of primary and community health programmes, an important strategy to ensure that nutrition is adequately funded is to ensure that primary healthcare is also adequately funded.

Throughout this chapter we have also seen that sub-national governments can play an important role in fiscal space for nutrition, especially where decentralisation gives them the power to collect and allocate revenue at local level. Sub-national governments can also receive ODA directly and improve the efficiency of their nutrition programmes, freeing up fiscal space.

We hope we have been able to explain the relevance of some of the macroeconomic considerations that need to be taken into account when advocating for additional resources for a particular sector.

MODULE

5

Budget and Expenditure Tracking





Overview of the module

A. Why is this module important?

Expenditure analysis can provide the data and evidence to enable stakeholders to improve spending performance and advocate for greater and better investment in nutrition. Expenditure analysis can be used to assess the efficiency, effectiveness, and equity of government budgets, to review if funding allocations are sufficient and appropriate for the government's policy goals, and to support the tracking of spending. This module aims to deepen participants' skills in expenditure analysis at the sector level and to show the scope and possibilities of public expenditure analysis.

B. Why does this matter for governments?

Nutrition stakeholders are increasingly using, requesting, or undertaking expenditure analysis in their work. Nutrition-focused budget analysis has been used to support the preparation of country plans and programmes and to examine cross-sectoral budget issues. Budget and expenditure analyses provide the evidence needed to influence budget processes and engage with cross-sectoral decision makers such as the parliament, Ministry of Finance, and local government to achieve nutrition policy, plan, and programme objectives. Expenditure analysis produces the insights to maximise expenditure performance by achieving the highest possible impact on nutrition outcomes from a limited budget.

In the context of the COVID-19 pandemic, which we know from previous modules is expected to place significant amounts of pressure on fiscal space and government budgets, this type of work will be especially important. It will provide critical evidence needed to support the protection, and expansion, of nutrition-sensitive budget allocations and help to ensure that resources are utilized to optimum effect.

C. Learning objectives

By the end of this module the learner will be able to explain what some of the most common types of expenditure analysis involve and when to use them, including:

- Budget analysis;
- Public Expenditure Review (PER);
- Public Expenditure Tracking Surveys (PETS); and
- Sector-specific approaches, e.g., National Health Accounts (NHA).

D. What does this module cover?

A number of public expenditure analysis tools have been used over the years that help explain what is being financed and how.

We will first review the importance of budget and expenditure monitoring and analysis, how it fits within the budget cycle, and what information it can provide us on factors affecting the delivery of services impacting nutrition. In this module, we focus on the monitoring and evaluation processes at the sector level. Expenditure analysis should be seen as part of the budget cycle, closing the link between policies, plans, and budget on the one side and service delivery outputs and outcomes on the other.

We will review different tools to monitor expenditures at different moments of the service delivery chain: from the moment policies and plans are developed to the achievement of service delivery outcomes. This module will explore the use of budget analysis, PERs, PETS, and NHA.

E. Reading materials

Core readings

- Fracassi, P., Picanyol, C., Knechtel, W., D'Alimonte, M., Gary, A., Pomeroy-Stevens, A., and Watts, R. (2017) 'Budget analysis for nutrition: guidance note for countries', available at: http://docs.scalingupnutrition.org/wp-content/uploads/2017/10/2017-Guidance-for-Budget-Analysis_EN.pdf. Read pp. 3–15. (12 pages)
- SPRING (2018) 'Putting budget data to work for nutrition', SPRING, available at: www.spring-nutrition.org/publications/briefs/putting-budget-data-work-nutrition. Synthesis of experiences from 11 countries on how findings from budget analysis activities have been used. (15 pages)
- Gurkan, A., Kaiser, K., and Voorbraak, D., PRMPS (2009) 'Implementing Public Expenditure Tracking Surveys for results: lessons from a decade of global experience', World Bank, available at: www1.worldbank.org/prem/PREMNotes/premnote145.pdf. Read pp. 1–13. (13 pages)
- World Bank Open Budget Portal on PERs, available at: <http://boost.worldbank.org/tools-resources/public-expenditure-review>.

Suggestions for further reading are given at the end of the module.

1. The role of budget and expenditure tracking

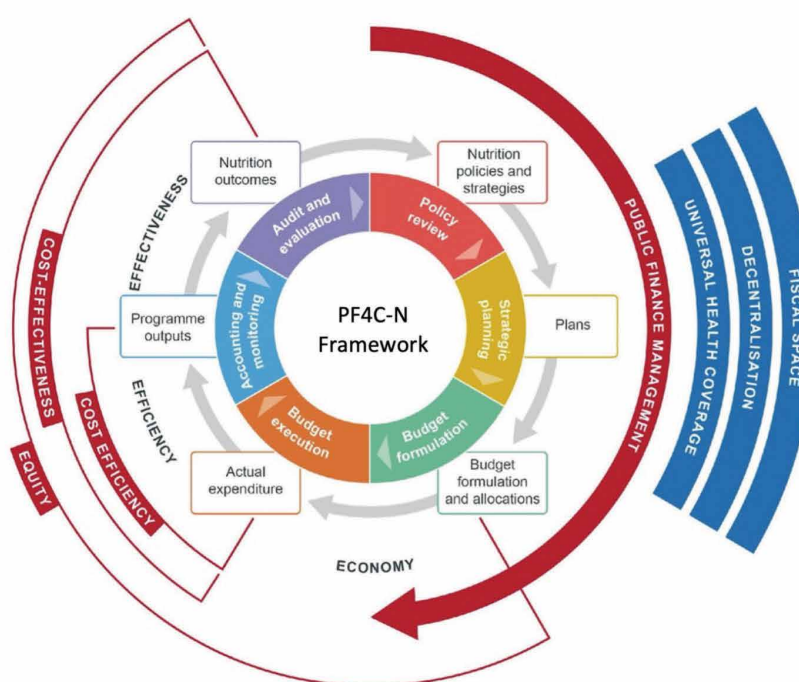
1.1 Budget and expenditure tracking in the Public Financial Management (PFM) results chain

Budget and expenditure tracking are important components used across the PFM results chain. As can be seen in Figure 31, budget and expenditure analysis should be carried out throughout the budget cycle, connecting policies to plans and to budgets. After the budget is allocated and expenditures have been executed, tracking of resources begins. These analyses are part of monitoring and evaluation to ensure plans and programmes are being delivered as

expected and have the intended outcomes. By looking at the tracking results together with service delivery outputs and outcomes nutrition programmes can also be analysed for their cost-effectiveness and cost-efficiency.

The results from these exercises inform programme management, but are also used in the next round of policy review for next year's budget preparation.

Figure 31: Budget and expenditure tracking for nutrition in the PF4C-N framework



1.2 Uses for budget and expenditure tracking

Expenditure analysis provides vital information to help policymakers plan, prioritise, manage, and monitor and evaluate policy and programme implementation. It is also an important tool to promote transparency and accountability.

Expenditure analysis is a strategic analytical exercise that goes beyond ‘interpreting’ or ‘monitoring’ the budget. An expenditure analysis will typically target specific expenditure items that correspond to thematic or policy priorities and actively slice and dice expenditure data to assess how funds have been used to transform plans and policies into actions, including across different sectors and government agencies and over time. This type of information is typically not available in annual budget papers or reports.

Analysing how funds are allocated and spent can highlight issues around and show opportunities for improving nutrition outcomes. Identifying how much is spent on a sector, in absolute terms and, in comparison to other sectors, provides insights into a government’s priorities. Budget and expenditure analysis can provide evidence for changes to programme design and targeted advocacy; assess whether the sector budget is consistent with sector plans and policy priorities and if it is a reliable guide to actual spending; assess whether resources are

reaching service providers; or track how funds flow from central to local level of governments and ultimately to the beneficiary. In addition, with the right design and data, budget and expenditure analysis can allow us to comment on the efficiency of public budgeting and spending in a particular sector, on a particular thematic goal (e.g., nutrition), and on whether public spending protects and promotes equity.

As we saw in Module 4, the COVID-19 pandemic has exerted pressure on fiscal space and reduced budgetary room for governments worldwide. The need for nutrition advocates to have high-quality and up-to-date evidence on budgets and expenditure within the sector is vital. This data can be utilised to support negotiations with decision-makers to ensure that as governments are forced to tighten budgets, allocations to sectors important to nutrition are protected, and even expanded in line with increased need. Further, budget and expenditure analysis can also ensure that the resources which are made available are used to the maximum effect and benefitting those most in need of it. As efficiency is one of the four parameters of fiscal space, increasing the efficiency of spending in nutrition could constitute an important pathway for improving budgetary room within the sector.

1.3 Types of budget and expenditure data

There are a range of different areas of interest and approaches in budget and expenditure analysis. Any analytical approach begins with a policy question, which will help identify what elements should be covered in the analysis. For example, at the start of the analysis, a decision should be made about what sector or functional area of interest, what sources of finance, and what administrative level of expenditure are most relevant to the question(s) being asked.

It is important to define the functional area of interest precisely and to identify clearly how it relates to functional and sectoral categories in the country, as well as how it aligns with the relevant government structures. National sector policies and plans and ministry mandates will help with this mapping. For this course, we are focusing on the functional area of

nutrition interventions in the health sector. This functional area will not necessarily align with the definitions and structures used within the government or the budget. In some cases, the policy question may fall within a single sector and within the mandate of one ministry, such as health. Other policy questions are multi-sectoral, which means they cut across traditional sector boundaries and involve multiple government ministries. For example, there may be questions on government expenditures on nutrition in multiple sectors, including in health, education, social protection, and agriculture.

Careful identification of the sectors and ministries that will be covered in the analysis will help ensure a complete picture of the services and activities of interest. In addition, approaches to measure and track

budgets and expenditure can differ slightly across sectors, which may change the type of expenditure analysis that can be undertaken. We will provide a quick overview of a health sector-specific approach to track expenditures later in this module, but it should already be clear that comprehensively analysing functional expenditure—especially if this maps across several administrative units—can be complex. In those cases, it may be useful to focus the analysis on specific expenditure questions or programmes, or to limit the analysis to one or a few administrative units.

We can also analyse expenditures by source of finance, classified into four categories, as in Figure 32:

- (i) public–internal (tax revenue collected by the government);
- (ii) public–external (aid from bilateral and multilateral institutions);
- (iii) private–internal (user fees to providers); and
- (iv) private–external (private foreign companies supporting programmes).

Figure 32: Sources of finance

	Public	Private
Internal	Tax revenue	User fees to providers
External	Aid from bilaterals or multilaterals	Private foreign companies

Non-governmental organisations (NGOs) are often a significant source of financing for services in nutrition. We classify sources of finance based on the initial funding stream. Since many NGOs are funded through aid, they will most likely be classified under ‘public–external’. This is important to note as NGO financing is often double-counted in expenditure analysis when information is collected from both the NGO and the primary donors.

‘Source of funding’ is used to help distinguish between a ‘sectoral expenditure analysis’ and a ‘public expenditure analysis’. A sectoral expenditure analysis covers public and private funding and all types of providers for a particular sector of interest, while a public expenditure analysis covers only public spending. If a public expenditure analysis is conducted in a single sector, it is a subset of a sectoral expenditure analysis. We can also analyse

spending by administrative level (i.e. central, district, or service delivery level).

In decentralised contexts, a comprehensive expenditure analysis quickly becomes a complex exercise. Expenditures across all levels of governments have to be identified; data from different sources have to be collected and analysed as part of one overall picture. Particular challenges include avoiding double-counting or under-counting if financial information databases are poorly integrated, especially if nutrition programmes are donor-funded.

Budget and expenditure analysis plays a key part in the budget cycle. It is used to link the objectives of the policies and plans that the country has prioritised to the achievement of sector outcomes, going through the budget allocation and execution processes.

1.4 Types of tools

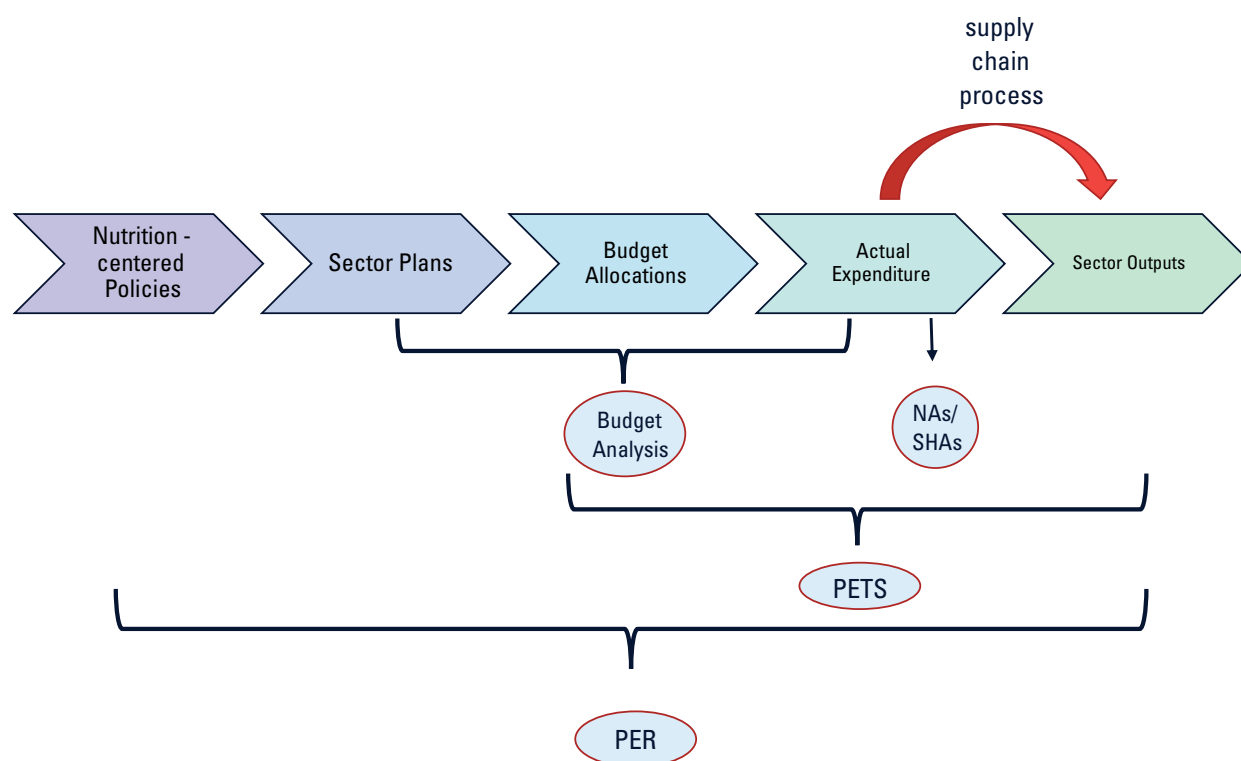
Figure 33 places the tools we review in this module along the service delivery chain. In practice, the division between the tools is not so clear-cut as it depends on the level of detail of the study, and some studies can combine elements of different tools. However, the figure provides us with an illustration of the focus of each tool within the service delivery chain.

A budget analysis covers budget allocation and actual public expenditure. A PER goes a step further and links budget allocation and execution to the sector policies and plans. A PER can stretch further to cover

sector outputs. For example, PERs often look at cost per unit of service delivery, but not at the same level of detail as a PETS. A PETS compares budget allocations to actual public expenditure at the different administrative levels, from the central government to service delivery units, linking actual expenditure and sector outputs.

National Accounts (NAs), such as NHAs, focus on actual expenditure, including expenditures from the private sector (households) and donor funds (including those off-budget).

Figure 33: The tools in the service delivery chain



Source: Elaborated based on Gauthier and Ahmed (2012)

Many monitoring frameworks to track public expenditures for particular purposes have been developed over the years. It is useful to review the experiences in applying these monitoring systems of public expenditures that cover sectors very relevant to nutrition outcomes (e.g. health). We can examine to what extent they have been successful in providing up-to-date and regular reliable data on

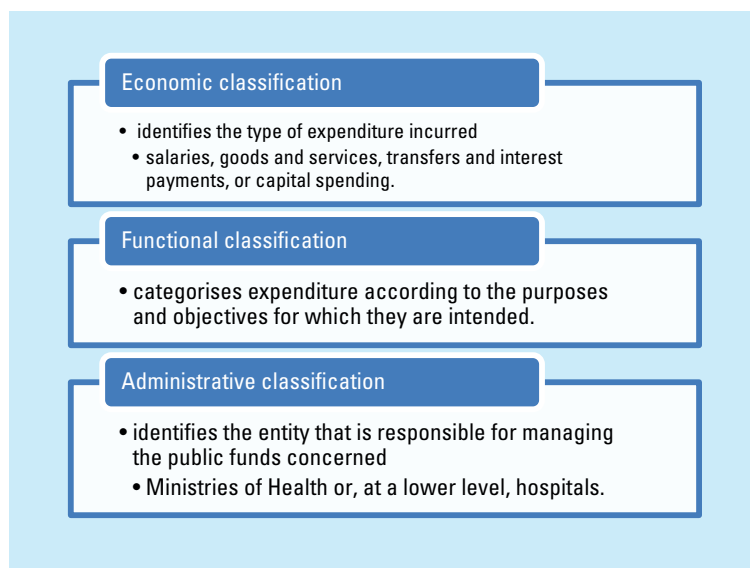
public expenditures in the areas that they cover. This includes checking if they are reporting on any particular expenditures that are specific to nutrition (i.e. whether they include nutrition in the disaggregation of expenditure or a sub-sector or intervention dimension that allows us to isolate expenditure on nutrition).

1.4.1 Budget analysis

The most common first step to analyse expenditures is to undertake a budget analysis. This basically consists of tabulating data from the annual national

budget across different dimensions (e.g. economic, functional, or administrative classifications) and comparing expenditures across years and sectors.

Figure 34: Categories of budget classification



Source: Jacobs et al. (2009)

Budget analysis can be undertaken at a national level, or it can focus on particular sectors (such as nutrition) or even a particular issue, such as Vitamin A deficiencies. If the budget includes data on programmes, it can also look at the composition of funding against more detailed policy goals. The depth of the analysis will depend on the level of detail in the budget documentation and the data that are available. For example, if a country presents budget information by region, it may be possible to analyse the equity of allocations on a territorial basis. Similarly, if spending on Vitamin A is not a separate item within the budget, a budget analysis will not be able to identify it.

Budget analysis often answers the following questions:

- How much did the government spend on nutrition?
- How much was spent on nutrition across organisations?
- What is the variation between planned/ allocated and actual expenditure?

- Is spending equitably distributed across regions?
- How well do sectoral budgets link to policies and plans?
- What are the funding gaps in the plan?

All of these questions are limited by the information that is readily available in the budget. For example, the question 'How much did the government spend on nutrition?' cannot be answered with a high level of accuracy because so much of nutrition expenditure is integrated into larger health programmes, such as child and maternal health. To disaggregate budget categories, we need to carry out a PER.

A budget analysis can be done relatively quickly. The time required will depend on the availability of historical public financial data and performance data and the complexity of the budget structure and documents, but the analysis should typically not take longer than one month.

Limitations

While budget analysis is a quick and accessible starting point for expenditure analysis, there are some limitations. First, we need to recognise that budgets do not necessarily respond to plans (e.g. the activities in the budget may be different to what is in the plans) or may cover only a small part of a national plan, especially where a large proportion of the national plan is funded by external resources, as is often the case in nutrition.

Second, the level of detail provided in national budgets is not always broken down to the necessary level of detail required to inform us of the input mix, service delivery mechanisms, or the intended purpose of the spending, which are necessary to analyse whether an intervention is being effective. This means that, for example, although a budget analysis can tell us how much is being spent on a particular programme (such as a national nutrition programme) and we might have some information on the composition of expenditure (such as salaries, non-salaries, recurrent expenditure, or capital expenditure), it will not tell us much about the needs coverage or allow us to compare across service delivery units. In addition, spending on nutrition in health is often not identifiable in the budget, such as with labour for the delivery of Vitamin A supplementation or counselling for exclusive breastfeeding, which are often integrated into larger programmes.

Third, salaries and overhead costs, which represent a significant proportion of expenditure in health, are often at least partly reported in a ministry's overall payroll and administrative costs, making it very challenging to isolate the proportion corresponding to a particular programme (e.g. how much of nursing time is attributable to nutrition?). Similarly, significant proportions of expenditure will fall within much larger system-wide structures. For example, when analysing expenditures on nutrition, we will want to know how much is spent on 'treating malnourished children in hospitals'. A large proportion of these expenditures are part of the costs of running health facilities and will not be separately identified within the budget.

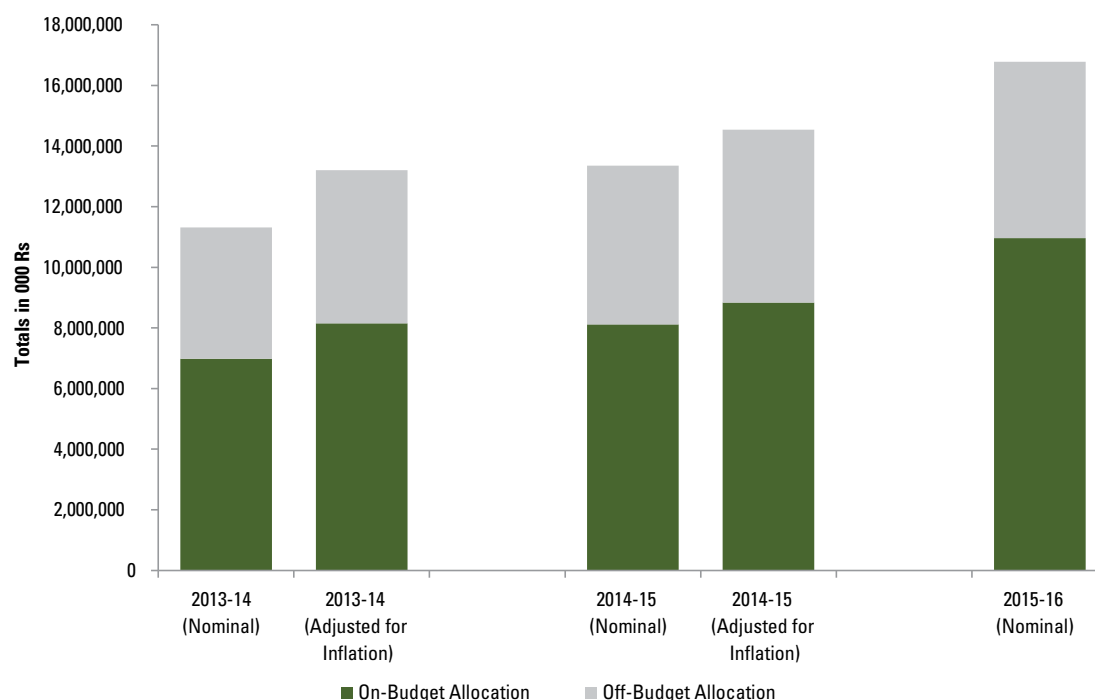
Fourth and finally, a budget analysis will generally not assess budget allocations or the composition of expenditure against a set of desired outputs or policy objectives. To address these policy questions, we need to carry out a PER.

Examples

At the moment, the Global Nutrition Report (GNR) provides the single most important effort to compile data related to nutrition, including public expenditures. In 2014, due to the lack of data on government expenditures on nutrition, the GNR provided data on government expenditure on the four sectors most relevant to nutrition (health, education, agriculture, and social protection) for three years: 1990, 2000, and 2010.

In 2015, 30 Scaling Up Nutrition (SUN) Movement countries participated in a rapid budget analysis to map allocations in national budget documents potentially contributing to nutrition (for details on the 3-step approach, see Fracassi et al., 2017). In 2016, 22 of the initial countries updated their estimates, and a further 19 new countries participated. The figures are based on in-country consultations and country-specific expert judgement (e.g. choice of key words to identify nutrition programmes; the selection of sectors to review; an estimate that a budget line of 'comprehensive post-natal services' is comprised of 15% nutrition programming) and cannot, therefore, be compared across countries. They can, however, provide comparison of budget allocations for nutrition-relevant interventions over time within each country as long as the budget lines and assumptions remain unchanged. Overall there was marked variation in the number of ministries, departments, and agencies identified as having budget allocations for nutrition across countries. However, some countries doing the exercise for a second time, showed a significant increase in the number of ministries and related programmes included since 2015 as a result of a more inclusive dialogue across sectors in 2016.

Nepal participated in a budget and expenditure analysis for the multi-sectoral Plan of Action for Nutrition over three fiscal years (2013/14 to 2015/16). The primary goals were to assess overall funding for nutrition and government commitments over time. The results showed improved government commitments across years (Figure 35) and the analysis identified opportunities to improve spending. These results informed the preparation of the subsequent three-year plan. It was also used as an advocacy tool, informing discussions with governments on how nutrition funding can be routinely tracked (e.g. through a budget code).

Figure 35: Budget Analysis of Nepal's Plan of Action for Nutrition (2013/14–2015/16)

Source: Pomeroy-Stevens et al. (2016)

1.4.2 PERs

A PER assesses the level and composition of budgeted and actual public expenditures (defined as domestic expenditure and foreign assistance) over the last three to five years, as well as budget expenditures against the desired policy goals and target outputs. A PER evaluates and recommends changes to both the allocation of public expenditures and to budget institutions.

It is important to emphasise that the focus and depth of PER analyses can vary significantly. PERs come in various forms and shapes. There are, however, typically six basic analyses in a PER:

- (i) comparison of sector expenditure versus government-wide aggregates (e.g. education expenditure as a percentage of total government expenditure; education expenditure *per capita*);
- (ii) a breakdown of expenditures by economic classification;
- (iii) a breakdown of expenditure by functional classification;

- (iv) comparison between budgeted and actual expenditure (by economic and functional classification);
- (v) a breakdown by financing source; and
- (vi) a breakdown by spending level or spending authority.

PERs in nutrition (PER-N) specifically examine nutrition expenditures. The PER-N can be defined to identify all nutrition-related activities or could be limited to nutrition activities in health. In some countries, PER-Ns may be deemed too narrow, but a PER of the health sector could be designed specifically to identify nutrition within health.

These analyses provide us with very relevant information. It may be important to see the sector trends relative to total government expenditure. For example, if total government expenditure has fallen, has health expenditure also suffered cuts or has it been protected? Has nutrition been reduced to the same or greater degree? In the case of per capita expenditure, it could be helpful to compare it with

other appropriate countries. For example, a comparison with other countries within the region or with similar Gross Domestic Product (GDP) per capita could provide useful information. International comparisons can point out anomalies, but there is no optimal ratio or norm for expenditure allocations.

Comparing budget versus actual data will highlight variances and raise questions on the impact on service delivery. For example, if actual expenditure on nutrition counselling is only 20% of budgeted expenditure, does this mean that planned hiring has not taken place? Perhaps the materials were not produced? How does this impact the adequate counselling of expectant mothers and caregivers?

PERs should ideally also include sub-national level expenditure, especially in fiscally decentralised countries where sub-national entities may have considerable policymaking and fiscal autonomy. The problem is that the finances are often weaker at the decentralised levels and it might mean replicating the same process done at the central level for each sub-national entity to be included, or for the sub-national entities that provide a big enough sample to extrapolate results at the national level.

PERs rely on existing reporting and data monitoring systems. A PER will normally not undertake primary data collection, although it should draw on existing and ongoing studies (e.g. data from the NHA or the Organisation for Economic Co-operation and Development/ Development Assistance Committee Creditor Reporting System database), and may recommend that additional studies be undertaken in the future for meaningful analysis.

PERs were initially designed by the World Bank. To date, they are mostly implemented by the World Bank and UNICEF, either alone or in partnership with other development partners. National governments are increasingly seeing the value of the PER as a diagnostic tool to assess or inform their policy and planning decisions.

While sector-specific PERs are the most common (for example health), it is becoming more common to apply the PER methodology to look at multi-sectoral issues. A PER can be used to analyse all public expenditures in a functional area, rather than in a single department or ministry, so it is possible to carry out a PER for nutrition even if the expenditures

cut across a number of ministries. PERs are becoming an increasingly popular tool for these complex multi-sectoral interventions, despite the additional challenges of obtaining compatible expenditure data across multiple sectors.

While PERs are a powerful and widely used tool, the time, technical skills, and costs required to complete a thorough and quality process can be significant. Costs will increase with scope: completing a PER for the entire nutrition plan will be more expensive than focusing a PER on nutrition in health expenditures only. Adding sub-levels of government will also increase complexity. Cost savings may be possible with a narrow scope or by building on previous analyses. If it is necessary to look for a simpler or faster option, a well-designed budget analysis (described above) can achieve several of the same objectives. A PER is more complex than a budget analysis as it takes the analysis deeper and is able to compare spending over time with both policy goals and performance indicators, making them particularly useful for the review of national policies.

We have previously discussed that the private sector often plays an important role in the provision of social services, especially where there is no market failure and therefore little reason for the government to become involved. It is also often the case in low-income countries that the private sector plays an important role in the provision of social services because the government does not (state failure), and households buy social services from the private sector. In recognition of this reality, a PER will sometimes attempt to capture some aspects of the role of the private sector.

Limitations

A PER usually takes at least six months to complete and can be costly. Length of time and cost depend on scope (number of sectors/levels of government), size of the PER team, access to data and access and engagement of government. A PER will typically require a team of at least two members: one specialist in public expenditure analysis and one nutrition specialist. Teams that combine national and international experts in each area are recommended as they can combine international best practice and experience with the PER tools and methods with a nuanced understanding of local context and data sources.

Examples

Bangladesh completed a PER-N in 2019 (OPM and UNICEF 2019). The primary objective was to analyse the level and composition of public expenditure in nutrition over three fiscal years (2014/15–2016/17), as well as the projections for 2017/18. Other objectives included assessing institutional mechanisms for the management of public finances for nutrition (including how nutrition budgets were formulated and allocated, disbursed, and executed), oversight and accountability mechanisms, efficiency, and equity of nutrition spending.

They found that nutrition expenditure represented about 1% of GDP and around 9% of the government budget. Bangladesh's multi-sectoral nutrition plan encompasses 15 ministries/divisions, of which 2% are classified as 'nutrition-specific'. Non-government programmes provide a significant portion of nutrition actions in health, including nine focusing on pregnant and lactating mothers, children under five, and adolescent girls.

This PER-N provided a number of opportunities for

action to improve both allocation and execution of nutrition expenditure. The analysis reported how state expenditures were used to meet nutrition goals and serves as a baseline to operationalise the next Nutrition Plan of Action. Recommendations were validated through a multi-sectoral workshop.

The PER-N identified a number of data limitations, including a lack of information on geographical spending and on public and city corporations. While these limitations mean that the PER-N can only provide an incomplete picture of nutrition spending in Bangladesh, the results provide guidance on where data are lacking and where a systematic capture of information is needed.

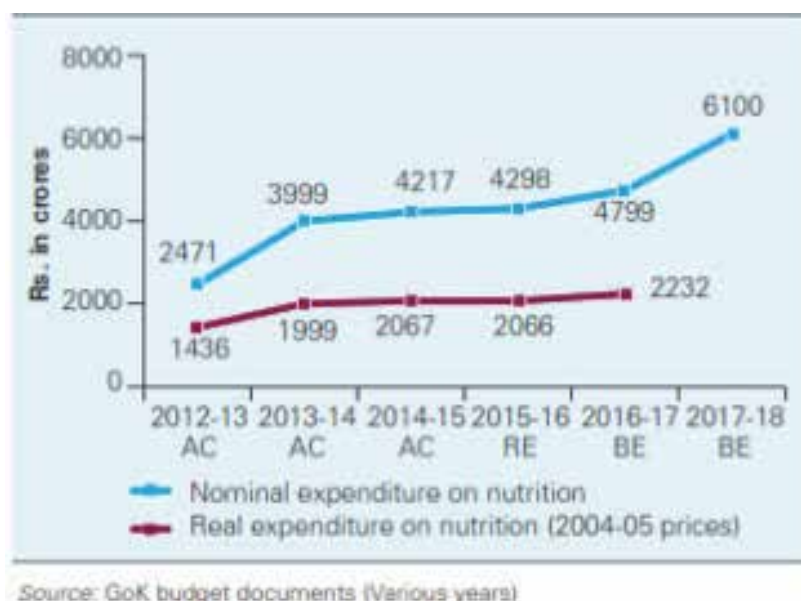
The state of Karnataka in India performed a PER-N that identified nutrition-specific interventions and expenditures over a six-year period and compared these expenditures with total state expenditure. As can be seen in Figure 36, the analysis showed increased spending on nutrition-specific interventions each year. Figure 37 shows an upward trend in nutrition-specific expenditure as a proportion of total state expenditure.

Figure 36: Public expenditure on nutrition-specific interventions for children in Karnataka



Source: State budget documents (Various years)

Source: UNICEF and CBPS (2017)

Figure 37: Nutrition-specific expenditure as a proportion of total state expenditures

Source: UNICEF and CBPS (2017)

1.4.3 PETS

A PETS allows a detailed analysis of financial flows, tracking the flow of resources through the various layers of government bureaucracy down to service delivery facilities (such as a clinic) to determine how much of the originally allocated funding reaches each level, how long it takes to get there, and what it is used for once it has arrived. A PETS can help identify fund leakage or spending bottlenecks and can help develop recommendations on how to improve the efficiency and equity of spending, as well as the quality and quantity of services.

A PETS can cover a broad range of resource flows (e.g. sector recurrent expenditures, salaries, capital expenditures) or it can focus on monitoring only some specific resource flows (e.g. capitation grants), in-kind items (e.g. brochures), or a specific programme, such as nutrition (Gauthier and Ahmed, 2012). A PETS relies heavily on administrative and accounting records, applying a survey-logic and tracking real resources over different administrative levels.

PETS often have an anti-corruption or audit focus, although this is not essential. A PETS can be used to pin down leakage (e.g. the gap between

micronutrients or severe acute malnutrition (SAM) treatment doses that are sent from the district level to the district health centres and those that actually arrive at the level of the district health centre) and administrative capture (the percentage of funds destined for a health facility that are retained for overhead costs at higher administrative levels). Mapping the flow of funds reveals the processes, rules, and mechanisms that are used to allocate funds from Ministries of Finance through to the line agencies and down through different levels of government through to the field. This process can provide concrete examples of weaknesses that are suspected, but have never been quantified or confirmed (for a list of typical tasks and activities that need to be carried out in a PETS, see Gauthier and Ahmed, 2012).

Because nutrition is often integrated with other activities and is a relatively small portion of the overall health budget, a PETS for nutrition only will rarely be cost-effective. A PETS in health can track nutrition as well as other components of the health sector and can be used to compare efficiencies and quality of services across health programmes.

Limitations

A PETS relies on different levels of administrative records. If these are not well kept or are false, then a PETS will not detect leakage in the same way that an audit might. Survey respondents may have an incentive to conceal information or provide misleading responses and political sensitivities around conducting PETS can stand in the way of securing full cooperation.

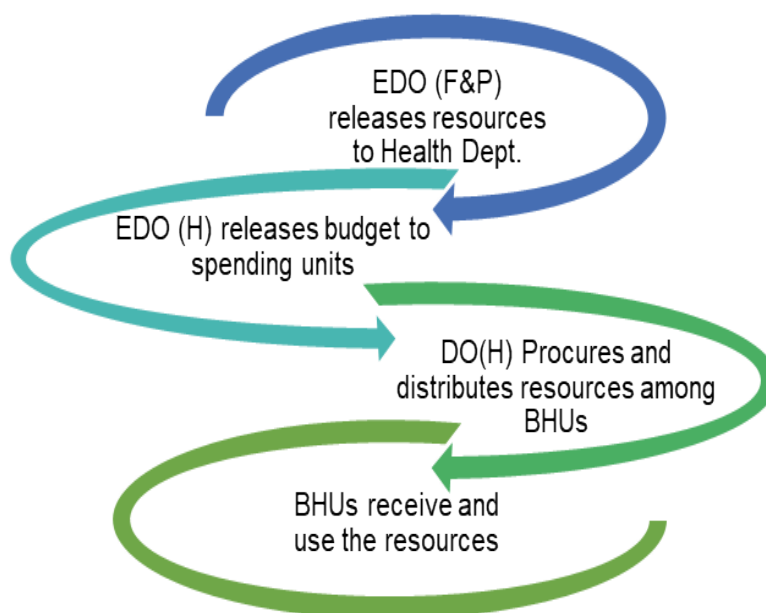
PETS tend to be slow and expensive. Large survey samples are required to generate results that are representative of the population (region or nation). They can, in theory, be completed in 6 to 12 months.

Example

PETS in nutrition are difficult to locate. A PETS in health in Pakistan investigated the flow of resources from district governments to health centres to identify reasons for leakage (Figure 38). It measured allocations against vacant posts. Budgeting for vacant posts that were not meant to be filled during the financial year amounted to tying up resources that were never meant to be utilised and the unutilised resources could potentially be diverted to some other sector by the district government. Table 13 shows the extent of the leakage.

As with PERs, PETS can potentially be restricted to nutrition expenditures, or nutrition can be a specific focus for a larger health PETS.

Figure 38: Flow of resources from district government to health centres



Source: Sub-National Governance Programme (2015)

Table 13: Budget allocations for salary of health personnel not reaching health centre in a district of Pakistan

	2011–12	2012–13
Budget estimate	302,253,279	164,574,699
Budget expenditure	246,760,006	277,689,373
Leakage due to general duty	9,401,259	15,583,975
Leakage due to absence of staff	19,657,339	21,225,631
Unutilised due to vacancies	55,493,273	–
Budget not reaching health units	84,551,871	36,809,606
Percentage not reaching health units	28%	13%

Source: Sub-National Governance Programme (2015)

1.4.4 NAs/System of Health Accounts (SHAs)

The production of an NHA involves measuring and categorising health spending and therefore includes some nutrition expenditure. One of the more widely used standardised frameworks to analyse health expenditures in countries is the SHA framework, which is an international standard for NHAs. There are a few key differences between an SHA and a PER:

an SHA covers all sources of funds, public and private, while a PER usually covers only public sources;

an SHA links sources, management, providers of healthcare services, healthcare functions, and beneficiaries—where the money comes from, who manages it, who provides the services, how much is spent on what services, and who benefits from them;

the SHA classification is designed to be internationally comparable; and

an SHA includes actual expenditure only.

NHAs describe the flow of resources and track expenditure on health. They cover actual expenditure but not budgets or commitments.

The production of an NHA requires extensive data collection from government, NGOs, donors, employers, insurance companies, households, and service providers sourced from a number of public records, insurer records, and household surveys. It

results in a standard set of tables that organise and present health expenditure information in a simple format. Low- and middle-income countries that have produced detailed NHA reports have typically revised them every three to five years, although irregularly. An NHA addresses questions such as the following:

- Where do resources come from?
- Where do they go?
- What services and goods do resources purchase?
- Who benefits from them?

The NHA can provide an estimate on actual health expenditure on nutrition as defined by the classification on the health accounts, but its usefulness is limited since nutrition is explicitly identified in only two areas of the SHA:

- Dis.3 nutritional deficiencies; and
- HC.6.1.2 nutrition information, education, and counselling programmes.

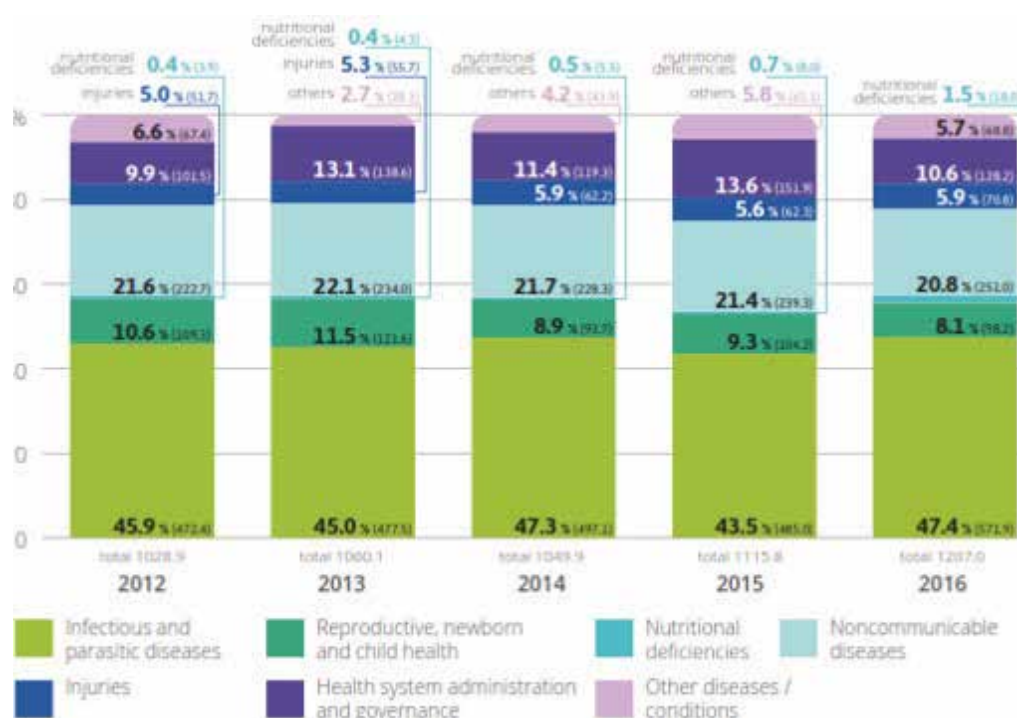
Limitations

There are a number of limitations and challenges when following SHA 2011 methodologies. These include the need for a large amount of data, the fact that the SHA 2011 classification system does not always accurately reflect health systems, the fact that the NHA tends not to align with a country's routine expenditure tracking exercises (carried out for example by the Ministry of Finance), and the fact that results can rely heavily on assumptions.

Example

Cambodia used an SHA to review health expenditures from 2012 to 2016 using seven SHA disease categories. Figure 39 shows that spending on nutritional deficiencies was 0.4% of health expenditure in 2012, rising to 1.5% in 2016, an increase of 375% in four years.

Figure 39: Current health expenditure by disease (in US \$ millions), Cambodia, 2012–16

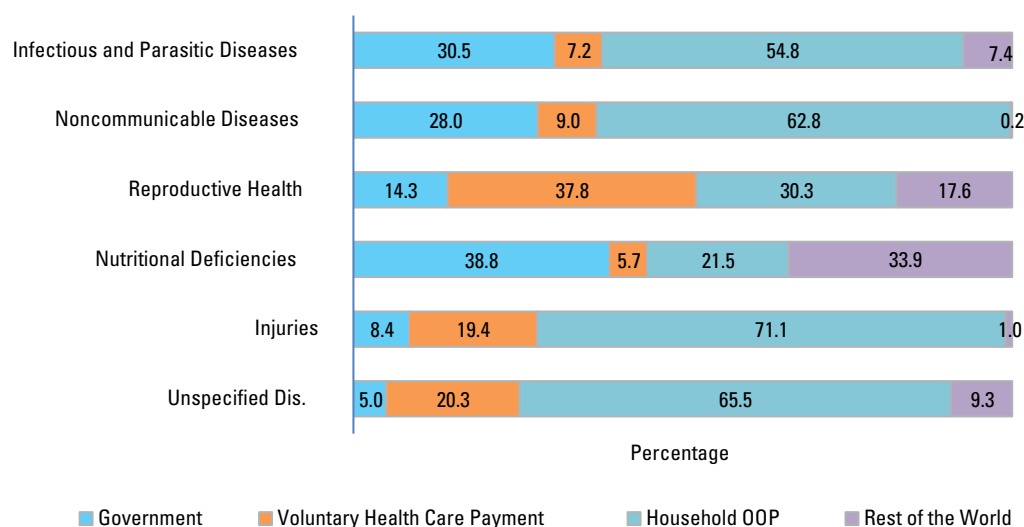


Source: Cambodia NHA (2018), licence: CC BY-NC-SA 3.0 IGO

Nepal performed an SHA for FY16 and separated expenditures by source of financing and by age of beneficiary. Figure 40 shows government expenditures were 38.8% of all spending on

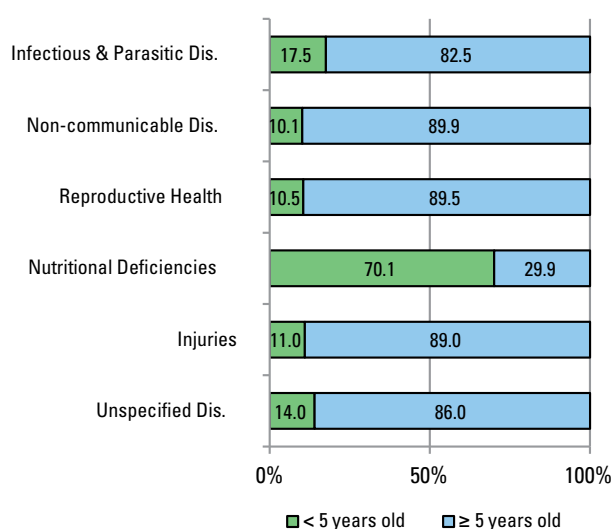
nutritional deficiencies, the highest share for any disease category. Figure 41 shows that 70.1% of spending on nutrition deficiencies was aimed at children under the age of five.

Figure 40: Disease expenditure distribution by financing source, Nepal FY16



Source: Ministry of Health and Population Nepal (2018)

Figure 41: Disease expenditures by age group, Nepal FY16



Source: Ministry of Health and Population Nepal (2018)

The SHA is limited by the standardisation of the codes, but the SHA framework does allow for additional national classifications. Countries could

choose to expand on the SHA framework to mirror the strategic plan and/or budget more closely.

1.5 Choosing the right tool

As explained above, the first thing to know before carrying out any expenditure analysis is why you want it: **how will you use the information from the analysis?** Expenditure analysis is not something that should be done in isolation; it should fit into a policy dialogue and, where suitable, a reform programme. This is ultimately what should guide which tool to use.

The choice of instrument depends on the purpose. If the purpose is to track public resources annually on a regular basis and to have an overview of in-country general expenditure trends and patterns, then a budget analysis could be the best option. If the purpose is to review the coherence of nutrition expenditure relative to the nutrition policy or plan, then a PER is likely to be more helpful. If what is needed is an in-depth understanding of the implementation and financial flows of a nutrition programme from the allocation of resources down to the beneficiary to check if funds are arriving at frontline facilities and having their intended purpose, a PETS would be more appropriate. If the purpose is to have data comparable across countries for global rankings and benchmarks, then a system of NAs such as the health accounts and its variations might be the most suitable method.

The choice of instrument also depends on country context. Data availability and the relative strength of the PFM systems in the country play a role. Some countries may be familiar with a particular tool or methodology based on expenditure analysis carried

out in the past. Lessons from past analyses should be reviewed to understand what challenges were encountered (such as data limitations), how they may appear in future analyses, and how to overcome them.

The tools presented vary in terms of coverage, the frequency with which they are carried out, and the resources required for their implementation, including time, expertise, and costs. As noted above, it is likely there will need to be a balance between the coverage and detail of the analysis. It is not realistic to attempt to collect detailed information at all administrative levels on all types of expenditures for an entire sector and for a whole country.

One of the choices that needs to be made is whether the information is required only at a particular point in time or whether you want to repeat the exercise regularly, say annually or every three years. Most of these studies are not designed to be carried out annually, given the intensity of resources and the time lag between the start of the study and when the findings are likely to become available. In some cases, the data presented can be one or two years old.

Finally, it is important to note that **these studies are quite resource intensive** and, as such, resource constraints are likely to be one of the factors limiting the choice of instrument and its scope. Enough time should be dedicated to preparation and study design before embarking on these exercises.

2. Concluding remarks

In this module, we have explored the concept and utility of budget and expenditure tracking in nutrition. We have reviewed the experience in expenditure analysis, going through the most commonly used tools, and found that each of these tools can be used for different purposes.

All of these diagnostic tools are non-routine analyses: they are not included as part of the regular monitoring or evaluation function of the budget cycle. This is important, because, as we have seen in Module 2 on the budget cycle, routine financial information often does not provide all the information we would like to have on nutrition expenditure. This is because much of health-related nutrition expenditure is integrated into larger spending categories, such as district health centres or 'child health' programmes. As a result, non-routine expenditure tracking tools are the only way to provide us with the nutrition expenditure performance information we need.

We have seen there are a number of issues to take into account when choosing between tools. These tools can be intuitively simple, but they are complex to implement. Many studies have failed to provide robust findings or conclusions that can fit into the planning cycle.

Buy-in and government support are essential for the implementation of any of these studies. It is unlikely that any of the above studies can have an impact without government ownership by those who control the data. Most importantly, the studies must fit into a policy dialogue and, as such, leadership by ministry and sector partners is key. Similarly, these exercises should be accompanied by advocacy and dissemination activities to increase the use and impact of the evidence generated. The need for this type of work is exceptionally important now, during the COVID-19 pandemic, when government budgets are stretched and budget allocations to the nutrition sector may be threatened.

We need to be very clear on what it is we are going to analyse and track. Prior to starting any of the above, it is very important to carry out a **rapid data assessment**. What expenditure data are available and at what level of disaggregation? Are the data credible? What are the main gaps we are likely to find and how can we address them? If we find that there are very little data or that the quality of the data is very weak, we should redefine the research question and the scope of the study. Many studies have failed because the data availability was not adequately assessed before starting the work. Undertaking a rapid data assessment before embarking on any in-depth study can save a lot of time later on.

There is often a **trade-off between coverage and detail**, particularly in the case of PETS. It is the usual breadth versus depth question. One of the issues that has been identified from past surveys is that coverage has been overambitious and, as a consequence, the quality of the survey has suffered. Data limitations also place an important constraint. Gathering information on line ministries' entire sector flow can be very difficult.

Ultimately, the choice of instrument and the design of the study has to be guided by the research question. What is it we want to know and for what purpose? A budget analysis might be comparatively easiest to implement, but the analysis is constrained by the structure of the budget. NHAs follow an imposed structure and only track two nutrition expenditure categories. PETS are resource-intensive instruments that are rarely carried out for nutrition. PETS in the health sector provide an opportunity to include nutrition questions. A PER is a versatile tool that can be adjusted to answer specific policy questions. It is relatively resource intensive, but if well-planned and well-implemented can provide the sector with vital expenditure performance information not available through any other means.



MODULE

6

Decentralisation



Overview of the module

A. Why is this module important?

Decentralisation is an important feature of the public financial management (PFM) policy and implementation framework. A chain analysis of Public Finance for Children - Nutrition (PF4C-N) materially differs depending on the form of decentralisation. Since this course cannot cover all aspects of decentralisation, it is important to ensure that course participants are sufficiently acquainted with its general concepts to decide whether to pursue this subject in more depth in the country-level follow-up training and support programmes.

The level of budget decentralisation and the way in which decentralisation is managed can support or hinder the implementation of nutrition programmes. An understanding of how decentralised finance functions is essential in an analysis of equity. Throughout the COVID-19 pandemic, it has become clear that the level of decentralisation within a country can dramatically impact the speed and quality of decision-making and collaboration across government levels. Therefore, understanding decentralisation, and its functionality within different settings, is increasingly vital if we are to ensure that all PFM systems work quickly and smoothly.

Fiscal decentralisation is relevant in all phases of planning through to budget allocation, execution, and reporting.

B. Why does this matter for governments?

Most service delivery takes place at the most decentralised level of government. In many countries, a large proportion of expenditures on social sectors (e.g., health; education; social protection; water, sanitation, and hygiene) is managed at the sub-national level. However, sub-national funds are often poorly tracked and especially when decentralisation arrangements are new, management of decentralised funds can be a challenge.

This module suggests ways in which country governments plan and implement nutrition programmes in a decentralised setting. This module contains information that is hopefully directly useful in providing support to local governments and other sub-national institutions in planning and budget management, as well as for analysis of constraints in funding flows, budgetary execution, and financial and performance reporting of nutrition expenditure.

C. Learning objectives

By the end of the module participants will:

- have a high-level understanding of the most important aspects of decentralisation and its implications on PF4C-N; and
- be confident in deciding whether to invest further efforts in financial decentralisation and financial planning at the sub-national level.

D. What does this module cover?

This module provides a grounding in decentralised government finance (DGF) and points out ways in which this knowledge can help participants secure better nutrition results. DGF is conditioned by the nature, extent, and drivers of the decentralisation model it supports. This module will:

- identify various rationales behind decentralisation;
- describe the most common forms of decentralisation;
- elaborate on the difference between devolved and deconcentrated budgets; and
- focus on the link between decentralisation and financing for nutrition.

E. Reading materials

Core readings

- Rao, S., Scott, Z., and Alam, M. (2014) 'Decentralisation and local government: topic guide' (3rd ed.), GSDRC, University of Birmingham, Birmingham, UK, available at: www.gsdr.org/wp-content/uploads/2015/07/DecLocGov2014.pdf. (3 pages). Read pp. 11–13 on revenue sources and fiscal decentralisation. This topic guide provides a clear, concise, and objective report on research on decentralisation and local government.
- Fjeldstad, O.-H. (2014) 'Fiscal decentralisation in developing countries: lessons for Bangladesh', CMI Brief 13(2), available at: www.cmi.no/publications/file/5125-fiscal-decentralisation-in-developing-countries.pdf. (3 pages). This brief examines fiscal decentralisation experiences in developing countries and explores factors affecting the reform process that could inform future policy and research on fiscal decentralisation in Bangladesh.
- SIDA (2007) 'Fiscal decentralisation and local influence in PFM', in: Public Financial Management in Development Co-operation—A Handbook for SIDA Staff, SIDA, available at: www.sida.se/contentassets/caf5be28d6a740b8b43256a040402dcc/public-finance-management-in-development-co-operation_1394.pdf. (7 pages). Read Chapter 8 (pp. 123–129) of the Handbook for SIDA Staff. These pages itemise the financial management challenges faced in decentralisation and suggest approaches to fiscal decentralisation in development cooperation.

Suggestions for further reading are given at the end of the module.

1. About decentralisation

Decentralisation has been defined in many ways, but for the purposes of this module we can consider it to be the assignment of public functions to sub-national authorities³¹ along with structures, systems, resources, and procedures that support the implementation of these functions to meet specific goals.³² Another more normative definition with a strong focus on devolution states that

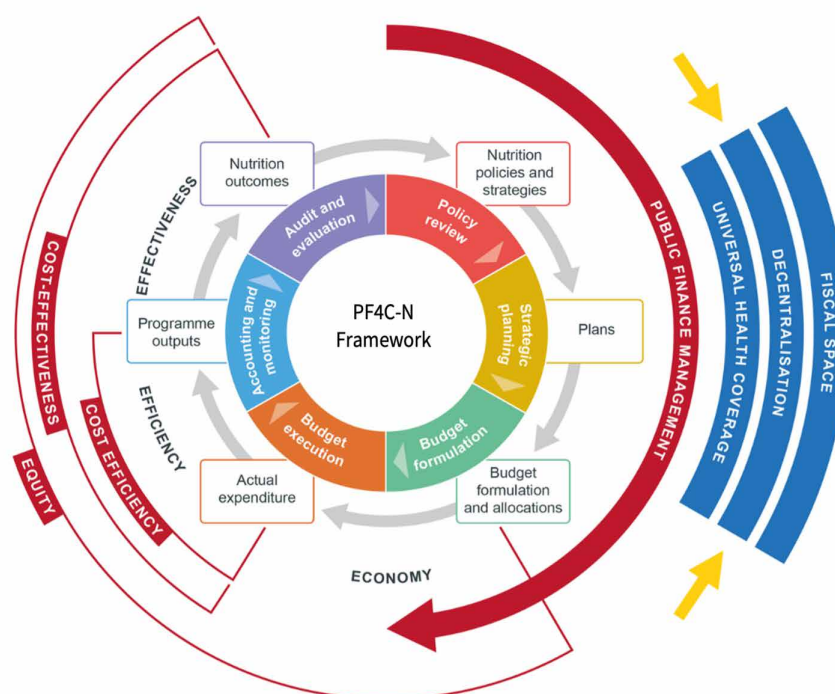
‘decentralization is the empowerment of people through the empowerment of their local governments’ (Boex and Yilmaz, 2010). In reviewing DGF we will focus on the resource component of decentralisation, but we will also consider other aspects of decentralisation that can affect the quality of financing.

1.1 Decentralisation in the PFM results chain

Decentralisation is an important component across the PFM results chain. As can be seen in Figure 42, responsibilities of local government need to be incorporated within sector plans so that budgets can be allocated to the appropriate authorities. Once

budget allocations are determined, identified local authorities are responsible for implementation and expenditure. This means that local entities are also responsible for monitoring outputs and reporting on outputs and expenditures.

Figure 42: Nutrition in the PF4C-N results chain



31 The term “sub-national authorities” includes both ‘local administrations’ (the local arms of central government) and relatively autonomous, elected local governments.

32 This definition is adapted from Smoke (2013:2), although it is one of many similar formulations.

1.2 Rationale behind decentralisation

Arguments for decentralisation can be categorised as administrative, political, or economic. From an administrative perspective, it is simply not possible to manage all decision making from the centre, and larger countries have a greater need to decentralise. The key political argument is a democratic one: decentralisation creates opportunities for greater participation and accountability, while simultaneously enabling regions and districts to exercise some degree of autonomy. Economically, it is argued that decentralisation can bring about an allocation of resources that better reflects the needs and preferences of citizens.

The key argument for decentralising revenue and expenditure authority to either sub-national governments (devolution) or regional/district field offices (deconcentration) is explained by the 'decentralisation theorem' (Oates, 1972). In a country setting where regional and local populations are unlikely to have identical demands for public services, governments that are closest to their citizens are better able to adjust budgets and more efficiently deliver a bundle of public services responsive to community preferences. The implication is that, where feasible, responsibility for public services should be assigned to the lowest level of government.

On the other hand, there are specific challenges associated with the process of transferring responsibility and authority for revenues and expenditures to local levels of government. These include less financial management capacity at the

local level; the need to strengthen national capabilities for monitoring and auditing local authorities to limit opportunities for corruption; and threats to macroeconomic management and stability. Macroeconomic management is particularly a concern where there are significant tax-sharing arrangements between central and sub-national governments. Macroeconomic stability is a major concern when sub-national governments are given borrowing powers and there is limited monitoring and auditing capability in central government.

Despite these arguments, decentralisation in practice is a highly political endeavour. It has been driven by (or limited by) factors other than those stated above, and political pressures often determine its extent and nature. Political rationales that are not purely democratic have included (adapted from Tideman and Steffenson, 2010):

- the need to contain regional disaffection (Indonesia; Papua New Guinea) or to satisfy regional or ethnic interests in post-conflict situations (Tajikistan);
- attempts by those at the centre to garner political support at the local level (for example military regimes in Pakistan);
- the pursuit of a neo-liberal agenda in reducing the role of the state, mobilising local resources and reducing the cost burden of service provision on the central budget; and
- pressure from donor agencies or in heavily aid-dependent countries.

1.3 Common forms of decentralisation

Decentralisation comes in many forms: there is no standard model. The term **fiscal decentralisation** is generally reserved for the assignment of specific functions, as well as the transfer of fiscal resources and some degree of administrative authority to sub-national governments (e.g. provinces/states/regions; districts; municipalities; villages).

It is helpful to distinguish between two forms:

- **deconcentration**, or the transfer of responsibilities (including budgetary) to ministry departments and agencies located at the regional, provincial, and district levels (local administrations): in deconcentration, there is no transfer of power away from the central ministries. This is often described as the weakest form of decentralisation; and

- **devolution**, or the transfer of both responsibilities (including budgetary) and authority from central ministries to elected local governments, giving them some degree of autonomy in decision making: devolution is the most extensive form of decentralisation and is sometimes referred to as political or democratic decentralisation.³³

Whether a service delivery function is devolved to local governments or deconcentrated to local field offices of central government ministries, there are implications for how planning and budgeting decisions are made. Some differences between devolution and deconcentration are indicated in Table 14:

Table 14: Devolution and deconcentration

Local structure	Deconcentration	Devolution
Entity	Local administration	Local government
Legal	Part of national or state administration	Separate corporate body
Political	No political decision making power	Own political leadership, typically elected
Administrative	Staff are part of national civil service	Appoints own officials and staff
Fiscal	Budget is part of national budget and subject to national control	Develops own budget; can raise and retain own funds; can carry forward balances from year to year

Source: Adapted from Boex (2015)

These constructs are rarely encountered in a pure form. Decentralisation takes different forms in different countries, but it also takes different forms in different sectors within the same country. Decentralised systems evolve over time. Consequently, decentralised arrangements are neither standard nor static.

Governments may deconcentrate responsibility through budgetary and administrative responsibilities. This may include a bottom-up budgeting process, where local governments request funds based on

local needs that feed up through districts and regions to form an aggregated national budget, or a top-down approach, where the central government establishes funding streams and sub-national administrations determine how the funds are spent within parameters. As mentioned above, many countries have a combination of bottom-up and top-down decentralisation (e.g. Indonesia). In any case, the national government continues to set priorities and allocate funds. Local administrations also have the responsibility of tracking resources and reporting back to the central authority.

³³ **Delegation** is a third form of decentralisation: the World Bank indicates it is a more extensive form of decentralisation [than deconcentration]. Through delegation central governments transfer responsibility for decision making and administration of public functions to semi-autonomous organisations not wholly controlled by the central government, but ultimately accountable to it. Governments delegate responsibilities when they create public enterprises or corporations, housing authorities, etc. (World Bank, n.d.).

Devolution often unfolds over long periods, with domestic politics playing a decisive role in the extent to which responsibilities and resources are transferred to sub-national governments. Sub-national governments also have some degree of autonomy in raising and retaining funds. Even following fiscal decentralisation reforms, central governments still make key budgetary decisions with consequences for service delivery functions managed by local governments. For instance, some countries opt for central government agencies to maintain control over specific components of sectoral procurement (such as for medicines and textbooks), particularly when demand for these inputs is similar across regions. National policies and regulations (e.g. centrally-mandated teacher–pupil ratios or health treatment regimes in health) can also influence sub-national expenditures.

There is no consensus among scholars about what might constitute ‘best practice’ in decentralisation, in part because decentralisation is so multi-faceted and context-specific, but also because academic research ‘has been unable to confirm to what extent (or under what conditions) a greater degree of decentralization

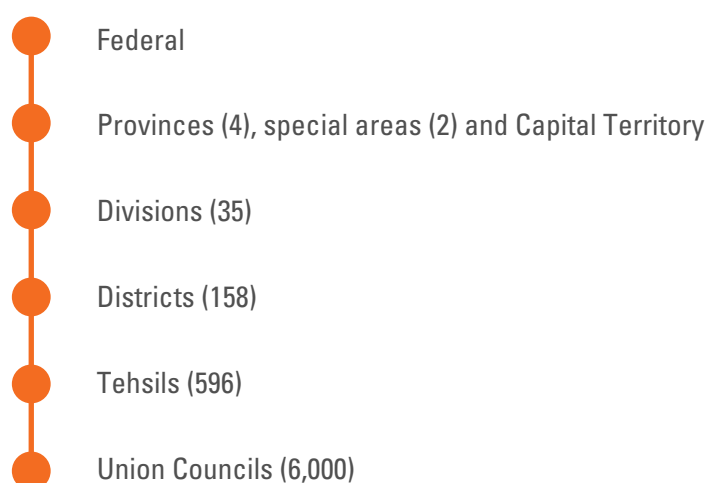
results in better development outcomes. ... The absence of such evidence can be attributed in part to the complexity of multi-level governance and service delivery systems as well as to the absence of the necessary data’ (Boex and Edwards, 2015:11).

As a result, the term ‘best practice’ has little relevance and should give way to ‘best fit’, with practitioners selecting from a flexible menu of options over time, most of which are associated with mixed outcomes. This is equally true of options for financing activities at the sub-national level.

Pakistan and Nepal provide two examples of countries with a high degree of fiscal decentralisation. Pakistan passes the majority of fiscal authority to its four provinces (Figure 43). Nepal funds flow through seven provinces to 753 local governments.

This introductory section shows how important decentralisation can be for nutrition: in a decentralised context, PF4C-N is managed in an entirely different way and the tools and analyses of this course will have to be adapted to that reality.

Figure 43: Decentralisation in Pakistan



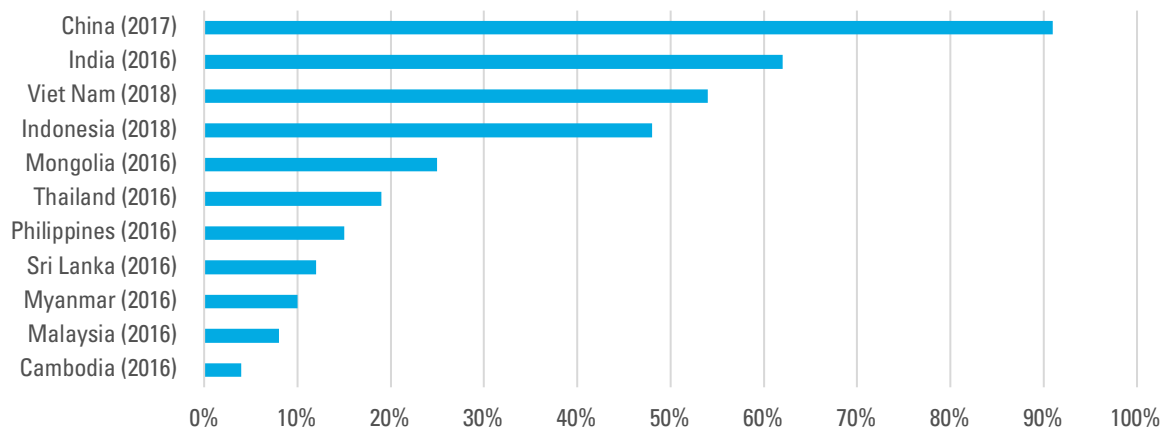
2. The significance of decentralised government finances

Decentralised Government Finances (DGF) covers *all the resources* managed at the sub-national level, whether through funding arrangements under deconcentration, through funding provided to elected local governments, or through funds generated and retained at the local level. This distinction is important because many studies look only at the funds transferred to and spent by devolved local governments. The recent study by Boex and Edwards (2015) is helpful in that it includes all spending that directly supports the local-level delivery of public services.

There are two reasons why DGF is an important area of PFM for nutrition stakeholders.

Firstly, public spending managed by sub-national authorities can be significant. A study by OECD on sub-national government finances revealed how the share of public spending at the sub-national level can vary significantly between countries (Figure 44). The relative importance of sub-national authorities as sources of public expenditure has been highlighted by the COVID-19 pandemic. As fiscal space has tightened since the COVID-19 pandemic, understanding which key stakeholders and decision-makers control public budgets will be increasingly important in protecting nutrition budgets. For this reason, understanding the level and nature of decentralisation of public financing within each country is vital.

Figure 44: Sub-national government spending as a percentage of total expenditure for select Asian countries



Source: OECD–UCLG World Observatory on Sub-National Government Finance and Investment (data extracted 17 March 2020)

Further, looking at health expenditures (which will comprise nutrition expenditures) at the sub-national level also reveals significant variation. For those countries for which we have information, countries that delegate less money to sub-national governments also designate a smaller proportion of those funds to health.

Throughout the pandemic, highly decentralised systems have, in some cases, resulted in varied responses by different sub-national authorities in a country, thus triggering inequities in public financing allocations. Further, decentralisation has also impeded the effectiveness of PFM systems, with additional administrative layers reducing the speed and efficiency of responses.

Table 15: Sub-national government expenditure on health for selected Asian countries (percentage of GDP)

Country (year)	Sub-national government expenditure on health as a percentage of GDP (percentage)
China (2017)	1.8
India (2016)	1.2
Indonesia (2018)	0.9
Philippines (2016)	0.3

Source: OECD–UCLG World Observatory on Sub-National Government Finance and Investment (data extracted 17 March 2020)

Secondly, DGF is essential to understand equity including regional disparities. The resources available for the social sectors and the service delivery potential they create are defined by the set of

deconcentrated and devolved allocation and disbursement systems within a domestic country context.

3. Sources of finance for the decentralised level

In processes of fiscal decentralisation, central and sub-national governments must determine what level should collect which revenues; what revenues should be retained at the local level; and what expenditure should be incurred at each level. This process is sometimes referred to as expenditure and revenue assignment and is carried out by the central

government in consultation with sub-national governments. It is generally enshrined in law or, exceptionally, in the constitution.

For each local government the additional financial requirement needed from central resources is a matter of simple subtraction:

$$\begin{array}{l} \text{Expenditure to be incurred} \\ \text{by the local government} \\ \text{(assigned expenditures)} \end{array} - \begin{array}{l} \text{Revenues to be collected and retained} \\ \text{by the local government or local} \\ \text{administration (assigned revenues)} \end{array} = \text{Additional financial requirement}$$

Put more formally, decentralised finance is often divided into four 'pillars':

1. the set of *sub-national functions* that governments should undertake (the determination of which level of government should be responsible for which expenditures);
2. the assignment of *local government revenue sources*, such as the authority to levy local
3. the *transfer of finances* such as grants and subsidies from central to lower levels of government, often referred to as intergovernmental transfers (IGTs);³⁴ and
4. arrangements for *local government borrowing and debt*.

34 Or sometimes Intergovernmental Fiscal Transfers

This shows that the notion of ‘fiscal space’ (discussed in more detail in Module 4) is modified in a decentralised context. In some decentralised systems both central and sub-national entities can collect revenue, receive official development assistance, improve efficiency and incur debt, and

manage revenue across all corners of the fiscal space diamond. Expenditure available for nutrition at national and sub-national level is therefore the resultant of the total fiscal space and the specific agreements regarding national and sub-national functions and how they are financed.

Box 11

Sub-national budget allocations for nutrition in Indonesia

Decentralisation in Indonesia took place in 2010 which led to devolution of government functions to the province and district levels and increased the transference of funds to sub-national authorities from 13% of central government expenditure to 30%.

For funding nutrition programmes, the following sources are available to the local government unit:

Tax and non-tax revenue – shared by the federal government and the local government’s own source of revenue:

- Equalisation grant from the central government to finance costs of service delivery – used for salaries and operational funds
- Special allocation funds – for procurement of pharmaceutical supplies and for public health programmes
- Health insurance scheme capitation funds for pharmaceutical supplies, home visits and training sessions
- Village funds allocated annually to each village from the national budget (allocation is calculated based on population, area and poverty rate) which have to be spent on specific priority activities, which includes nutrition
- External funds through private donations and external development partners

Challenges: Availability of financial resources for nutrition is not an issue at the local level but some of the challenges which lead to underinvestment in nutrition at the local level as follows:

- Lack of skills and experience to effectively plan, prioritise and manage funds to delivery nutrition services.
- Limited knowledge of nutrition among policy makers and planners leading to nutrition being de-prioritised
- Complex funding structure (i.e. multiple sources of funds available to finance nutrition) leading to disconnect between national policies and programme delivery e.g.
- Late disbursement of funds in certain regions leading to uncertainty in cash flow management
- Not being able to track spending on nutrition

Source: UNICEF (2018)

3.1 Fiscal decentralisation arrangements

Devolved systems

There is broad consensus that effective devolution requires the transfer of sufficient financial resources and the clear assignment of expenditure responsibilities between levels of government. The range of revenue sources that may be available to a local government in devolved systems, including local sources of revenue, is indicated in Table 3, together with observations about the levels of responsibility and autonomy they imply for local governments. These revenue sources can be considered in two groups—IGTs and local sources of revenue.

IGTs are often paid from a transfer pool (or several transfer pools with different sources and distribution criteria) according to an agreed formula. The manner in which the pool is distributed among local governments is important for equity. Bahl (2000) identified four models for distribution for a transfer pool among local governments:

- a derivation (revenue sharing) approach, in which the pool is determined as a share of a national tax (e.g. income tax) and each local government receives an amount based on collection of that tax within their boundaries;
- a cost-reimbursement model;
- a variety of formula-based grants; and
- *ad hoc* distributions.

Many IGT systems will use more than one of these models. There are also hybrid grants. For example, formula-based grants may contain provisions that set restrictions on certain costs. When seeking to engage with the effectiveness and equity of the IGT process and trying to understand how it impacts the sectors in which they work, the legal and operational details of IGT policy and practice should be investigated.

Formula-based grants also take different forms, including block grants, conditional grants, or equalisation grants. Table 16 shows the levels of spending freedom ('discretion') for different types of financing, as well as typical arrangements for financial reporting and audit.



Table 16: Overview of fiscal decentralisation arrangements at the local level

Local-level responsibility and autonomy for PFM functions	Revenue sources at the local level					
	Intergovernmental Fiscal Transfers			Local sources of revenue		
	Conditional grants	Block grants	Revenue sharing (with central level)	Assignment of revenue sources	Authority to incur debts/deficits at sub-national level	
Discretion in planning and budgeting	Low	High	Variable	Variable	High	
Discretion in management of funds (payments and accounting)	Low	High	Variable	High	High	
Financial reporting/accountability	Report to central level according to central standards	Part of local-level annual financial reporting	Often report to central level	Part of local-level annual financial reporting	Often part of national monitoring system	
Scrutiny/audit	Central audit by Supreme Audit Institution (SAI) ³⁵ and internal audit department	Often central audit by SAI combined with local audit requirements	Often central audit by SAI and internal audit department	Audit mainly a local responsibility. Often also audit by SAI	Often part of national audit	

Source: Olander (2007)

35 SAI is national bodies responsible for scrutinising public expenditure and providing an independent opinion on how the executive has used public resources.

Countries vary as to the relative importance of these sources of revenue. Table 17 shows the relative

importance of conditional and unconditional grants and revenue sharing in each of 10 Asian countries.

Table 17: Relative importance of transfer types for select Asian countries

Country	Relative importance of transfer types		
	Unconditional grants	Conditional grants	Revenue-sharing
Cambodia (2016)	High	None	Low
China (2012)	Low	Low	High
India (under 13th CFC)	Low	High	Medium
Indonesia (2012)	High	Low	Medium
Mongolia (2012)	Low	High	Low (suspended)
Myanmar (2016/17)	High	None	Low
Nepal (2017)	High	Medium	Not yet determined
Philippines (2012)	High	Low	Low
Thailand (2012)	Low	High	Low
Viet Nam (2012)	Medium	Medium	High

Source: UNDP (2019)

Conditional grants

Conditional grants are earmarked transfers from central government. They are generally provided to ensure the implementation of specific national policy priorities. As Table 17 indicates, conditional grants establish constraints around planning, budgeting, and the management of funds transferred to sub-national governments. Like all IGTs, conditional grants are dependent upon central government for their timeliness and reliability.

Conditional grants can be used to encourage local expenditures on prioritised social services, particularly when benefits of sector services spill over

to multiple jurisdictions (e.g. nutrition; preventive care; primary education) or when specific services are characterised by inequitable distribution. They can be used to direct funds to specific sectors or sub-sectors, as matching grants to motivate spending in key areas, or to provide funds for emergencies. As they are earmarked for specific sectors or activities, conditional grants can limit the autonomy of sub-national governments to use budget resources to meet the unique needs of their local populations. In addition, conditional grants can suffer from fungibility, where grants substitute for locally raised resources and therefore generate little or no net improvement in the intended sector outcome (Box 11).

Box 12 Fungibility risk

Fungibility risk is the risk that additional monies are spent for their intended purpose but displace other monies intended for the same purpose so there is no net resource addition to the activity or programme. For example, a sub-national government may receive a conditional transfer for a specified nutrition programme and then reduce the funding from its own resources by the same amount to free up funds for other areas. While the conditional grant is being spent as intended, there is no net increase in nutrition spending. Although the new funds in this example have been earmarked for nutrition, they enable the sub-national government to finance another activity altogether. In the decentralised context, a conditional grant may displace funds from local resources previously earmarked for the same purpose; alternatively, they may dissuade the local government from allocating its own funds in that area.

Box 13 Conditional grants for nutrition programmes in Vietnam

Vietnam has a decentralised structure of 63 provinces and cities. Annual planning and action for nutrition takes place at the provincial level but a large part of the budget for nutrition comes from central government budget allocation.

Conditional grants are provided for 16 target programmes including for nutrition based on provincial characteristics and to achieve socio-economic development targets set by the central government. These are known as the National Target Programs (NTPs).

For the National Target Program on Health, the Ministry of Finance and Ministry of Planning and Investment are responsible for financing decisions and monitoring while the line ministries (e.g. Ministry of Health) are responsible for budget allocations and oversight. The central government is responsible for the setting the regulations while local governments are responsible for proposing activities and implementing associated activities at the local level.

Source: Morgan and Trinh (2016), SUN (2016)

Conditional grants may incorporate matching provisions requiring local governments to match a portion of the transfer received with its own funding. The matching provision is used to induce local governments to produce the socially desirable amount of services and sometimes can encourage local ownership. The central government contribution often reflects the extent to which such spending is a priority in national development policy.

On the other hand, matching provisions that are poorly designed can have negative equity implications as they can benefit wealthier local governments more than resource-poor governments. It is important to remember that any restrictions or conditions placed on grants transferred to sub-national governments require a greater degree of information-sharing between governments (compared to revenue sharing). They also require more direct coordination between sector ministries

and between central and sub-national governments. These information and coordination requirements can lead to administration problems that overly burden sub-national governments and limit the effectiveness of the conditional transfer.

Block grants

Block grants are non-earmarked transfers from central government and are the principal tool for ensuring interregional equity. They are provided to meet the broad needs of local governments and are often formula-based.

As Table 16 indicates, with block grants (unlike conditional grants) local government has discretion in regard to the planning, budgeting, and management; they can decide how the funds should be used. As with conditional grants, financial reporting (and performance reporting) for block grants is provided back to the centre as part of an (audited) annual report.

Block grants may be supplemented by equalisation grants, which are intended to support poorer provinces and in due course to create greater equality in the quantity and quality of services between different regions. For example, a relatively poor region is likely to be less able to raise resources locally, while at the same time poverty rates may be higher and its needs are greater. An equalisation grant from central government can be used to make up for this in part, effectively transferring a higher amount to a poorer region than to a relatively wealthier one.

To maximise effectiveness, grants should be predictable well in advance, and where they are formula-based they should be adjusted regularly for changes in population, inflation, or other formula criteria. Common criteria for formula-based block grants include expenditure needs and population size, unit cost variations, local fiscal capacity, and measures of poverty. This last criterion is not considered to be ideal, since including poverty as a

block grant criterion does not ensure expenditure on poverty-reducing initiatives and may not lead to poverty reduction. Equalisation grants or separate monitorable poverty-focused grants may be preferred.

Revenue sharing (with the central level)

Revenue sharing means that certain revenues collected at the central level from one or more national taxes are shared with the local level. For instance, in the Philippines, a transfer pool comprising 40% of national internal revenue collections is shared at the sub-national level. In other countries, the revenue shared can be a percentage of a specific tax, such as value-added tax.

Revenue from assigned revenue sources

Sub-national authorities can raise money from assigned revenue sources, often property taxes, business licences, and other charges. Sub-national authorities have full discretion over the planning, use, and reporting of these revenues. However, with the exception of larger municipalities, options for raising funds at local level tend to be problematic (Fjeldstad, 2014). Property taxes require constant revaluation of properties; business licences incur high compliance costs; and user fees for services raise serious issues regarding equity and access,³⁶ particularly regarding health (and nutrition). Outside major towns and cities, local taxes and fees are likely only to cover the cost of recurrent expenditures (e.g. salaries) and therefore require IGTs to support capital investments, such as for the health and education facilities where many nutrition interventions are implemented.

On the other hand, decentralisation of taxes and fees can provide an important opportunity to simplify administrative procedures and make them more inclusive and respectful of local conditions. In contrast to national public goods (e.g. national defence), local taxes and local fees can often serve to create a clear link for citizens between the costs of services and the benefits they receive.

36 User fees and the equity issues associated with them are covered in more detail under Module 9 on Equity in Public Finance.

Box 14 Philippines decentralisation

Background: There are 1,715 Local Government Units (LGUs) in the Philippines which are either cities or municipalities. Each city or municipality is composed of multiple barangays, which are the smallest administrative units in the Philippines. While most city and municipal governments fall under the jurisdiction of the 81 provincial governments, 38 highly urbanized cities are administered independently. The Philippines was significantly decentralised under the Local Government Code in 1991, with responsibility for several functions (e.g. health and hospital services, social welfare etc.) devolved to the local governments who were additionally given revenue raising powers.

Revenue: LGUs have the regulatory authority to collect tax, levy various fees and charges and borrow from financial markets. In addition to this, they receive three types of inter-governmental fiscal transfers from the central government.

1. Block grants known as an 'internal revenue allotment' which is distributed across local governments using a formula based on three factors – population, land area and equal sharing and to different levels of government using a fixed proportion. A minimum of 20% of this is meant to be spent on development activities with broad guidelines on how it is meant to be spent.
2. Equitable share in the proceeds of national wealth within their respective areas – 40% of gross taxes, royalties and charges related to natural resources such as mines and fisheries. The revenue collected through this means is to be spent on development and livelihood projects.
3. Ad-hoc conditional grants (UN-Habitat, 2011).

In addition to these, LGUs also receive separate allocations that come directly from the various sectors (including health) at the national level.

Expenditure: The delivery of public health services is largely devolved to LGUs. The main role of the national level Department of Health is to provide technical assistance to the LGUs and ensure regular supply of medicines, nutritional supplements and vaccines. The central and local governments share responsibilities for procurement and training e.g. in the case of certain diseases such as HIV-AIDS or malaria, the central government provides the drugs, training of health staff involved in the provision of these drugs is joint responsibility while the salaries for the health workers is provided by the LGU. However, the LGU does carry out some procurement by itself such as for vitamin supplements (Manasan and Cuenca, 2015).

However, nutrition is an 'unfunded mandate' - the Local Government Code is unclear on where budget for nutrition committees, nutrition action plans and nutrition programmes comes from and financial commitment to nutrition is dependent on the leadership of the local chief executive. Some of the sources used by LGUs which have shown outstanding nutrition leadership include the local governments development funds, nutrition committees' sector budgets which are included in the investment plan, innovative mobilisation of local resources, other development funds such as the Gender and Development Fund, and external resources (Compendium of Actions for Nutrition, 2018).

3.2 Aid at the sub-national level

In general, aid is delivered to—and through—central government agencies. However, in some countries, it is delivered directly to sub-national authorities in the form of area-based programmes, with central government approval. While aid agencies find this logistically helpful and it invariably has strong support from the recipient districts, it has significant drawbacks in that:

- in most cases, the support is not included in the government budget (off-budget);

- it makes it more difficult for central governments to ensure horizontal balance among regions and districts;
- it requires parallel systems of accountability; and
- where districts are effectively ‘adopted’, the close donor–district relationship makes an exit strategy more difficult.

Direct delivery of aid at the sub-national level can occur in both devolved and deconcentrated systems.

Box 15

Examples of ODA for nutrition and health at decentralised levels

In Pakistan, the Department for International Development UK (DFID) has a Health and Nutrition programme that covers two provinces – Punjab and Khyber Pakhtunkhwa. Responsibility for health and nutrition programmes is completely devolved to the provincial governments which are responsible for its own strategy, planning, regulations, budgeting and service delivery (<https://devtracker.dfid.gov.uk/projects/GB-1-202488/documents/>).

In Indonesia, the Australian and Canadian governments finance a nutrition project in two provinces – East Java and Nusa Tenggara Timur. The project supports the iron and folic supplementation delivery to pregnant women and adolescent girls, vitamin A supplementation to children promotion the use of zinc and ORS to treat childhood diarrhoea (Nutrition International, 2017).

4. Devolved government finances and central-level controls

The transfer of expenditure and revenue authority through fiscal decentralisation does not mean central governments relinquish all responsibility. Fiscal decentralisation can generate adverse consequences for nutrition programming when central governments do not carefully consider how to align spending responsibilities and resources between levels of government within the intergovernmental system. This means central government authorities must retain responsibility for developing reform implementation strategies, including mechanisms to coordinate and monitor progress among sub-national governments, while also considering ways to discipline poor performance among local governments

that are not fulfilling their responsibilities.

Reasons for central control include:

- maintaining central responsibility for the national economy, national development, and the use of resources;
- ensuring that national minimum standards are achieved across the country;
- dealing with interjurisdictional issues;
- minimising the risks of local elite capture; and
- ensuring that appropriate skills and capacities exist within local governments.

However, counter-arguments include:

- the added complexity of decentralisation when the centre determines everything;
- the inability to address different local needs if the centre imposes uniformity;
- the political legitimacy of the local government if elected;
- occurrence of elite capture at national level as well as at sub-national level; and
- the ultimate ability of the central government to implement its controls effectively.

Clearly, the level of central government control is a matter of balance, and the final configuration will depend on the context, especially the political context. In most environments it is possible for the central government to set out a budgetary framework and set of regulations that achieve its goals while still providing autonomy to local governments to meet those goals more effectively and efficiently.

Importantly in devolved systems, the central government retains control of intergovernmental fiscal relations and can use this power to control or motivate local governments. In particular, it can:

- limit or extend the power of local governments by assigning greater or fewer expenditure responsibilities and/or revenue collection responsibilities;
- determine the total resources available to local governments through IGTs and affect the levels of expenditure by sector or expenditure type (e.g. by requiring handwashing programmes in schools) through policy changes;
- incentivise local revenue growth through the provision of matching grants; and
- incentivise actions through grant conditions (e.g. disbursement restrictions in the absence of timely fiscal accounting).

An understanding of the balance between centralised and decentralised authority over budgets is critical for governments to evaluate service delivery for nutrition programming at the sub-national level. The relationship is complex. Efficiency and equity can both be undermined if central budgetary controls are either too rigid (hampering effective local government management) or too loose (resulting in a wide variation in service quality and content). Again, a careful analysis of central–local budgetary dynamics is essential.

5. Issues in sub-national financial management

Effective service delivery in nutrition requires that funds flow reliably through agreed and secure channels and are properly reported and audited. However, the complexities of decentralised financial management give rise to many challenges;³⁷ in consequence, funds allocated in support of nutrition improvements may not produce the expected service delivery and results. Knowledge of these common pitfalls can enable central governments to engage effectively with sub-national governments to avoid common problems or to support remedies to correct them. Some of the more common challenges are summarised below.

First, the capacity to manage funds at the local level may be less than at the central level of government. This concern underlies many of the other issues discussed here. Local skills capacity

tends to be much lower at local level due both to lower educational opportunities and to lack of incentives to maintain skilled staff outside larger cities. For decentralisation to work effectively, staff at the local level must be equipped to plan, budget, implement, and report on activities that are part of a decentralised plan. For nutrition planning to be effective at sub-national level, civil servants with highly technical skills will be required.

Second, local governments may be charged with functions that are not fully financed. Such ‘unfunded mandates’ may be a result of politicised decision making, poor liquidity in central government, failure to consider the full costs of implementation, or part of a conscious strategy to reduce pressure on the central budget. This is why any budgetary analysis in support of service delivery for nutrition programmes

³⁷ An extensive list of these challenges, together with common reasons and possible remedies for them, is provided in Olander (2007), pp.123–128.

must start with identifying available budget lines and sources of funding. Remedies for resolving the issue of unfunded mandates lie in dialogue between the government at the national and the sub-national levels to clarify responsibilities and explore potential funding sources.

Third, the sub-national agency may not have timely and complete access to budgeted funds.

Reasons for this may include overly cumbersome procedures for the release of funds, limited banking networks, or poor IT or other infrastructure, which affects the replenishment of funds. In some contexts where an opposition political party controls a sub-national government, central government authorities may withhold or delay transfer for political purposes. Remedies depend on there being a clear understanding of the exact causes for delay or shortfalls, but clear documentation of the delays or shortfalls in funding is a prerequisite for any action. The timeliness and accuracy of intergovernmental fund flows can be assessed as part of a public expenditure tracking survey (PETS), described further in Module 5.

Fourth, financial reporting on use of funds may be inadequate or delayed.

Reasons for this can include lack of financial management capacity, lack of clarity in regulations, delays in feedback between the centre and local levels, or poor IT (or other infrastructure). Late or inadequate reporting undermines financial control, accountability, and transparency. After developing a clear idea of the underlying causes, remedies may include strengthening capacity in accounts reconciliation and reporting and improved central–local communication.

Fifth, fiduciary risk may be heightened at the local level.

It is generally understood that fiduciary risks are heightened where transparency and accountability is weak. The extent to which fiduciary risk does exist at the local level can be ascertained in audit findings and other procedures, but is more generally reflected in the quantity and quality of financial and performance information shared between levels of government and between the government and the public. The remedies again lie in the strengthening of capacity in financial management and audits, but also in working to create a political environment that is supportive of transparency and accountability.

Sixth, where funds pass through intermediate structures (line ministry headquarters; regional offices), funds may be partly retained there. Such issues can be revealed through mechanisms such as a PETS.³⁸ Once identified, pass-throughs should either be eliminated or included in the next round of costing and budgeting.

Seventh and last, local government spending may not reflect sectoral policies and priorities.

Alternatively, sectoral policies and priorities may not reflect local needs and preferences. This comes back to the issue of the balance of control between the central and local levels. It is difficult to enforce national standards where regions and districts are relatively powerful. In part, financial allocations for specific sectors can be controlled through conditional grants. Broad agreements between central and local government can be set out in service agreements in which ministries and sub-national authorities set out their agreed roles and responsibilities, including such things as financial responsibilities and audit requirements.

Two studies of Indian states illustrate some of these difficulties. Shrivastava *et al.* (2017) explain that 60% of funding of social sector schemes (called Centrally Sponsored Schemes) is borne by the state governments. Essential Nutrition Actions are budgeted under a variety of social sector schemes of the Union Government and are then implemented by the states, which also implement state-specific schemes. Since there is no Union budget for ‘nutrition’, tracking nutrition interventions would require state governments to publish disaggregated budget data for a number of programmes and schemes, especially those in which some of the components are relevant for nutrition.

Singh *et al.* (2019) show how multiple layers of government in two states led to significant delays in the release of funds, with subsequent underfunding and under-programming. District health plans are supposed to be approved by the state, but local-level input is absent from state plans. Union approval for state budgets is also delayed. In fact, in FY15, the authors found that these delays and staff shortages due to chronic underfunding resulted in only 9.1% of budgeted funds being utilised at the local level in one district in Bihar province.

³⁸ PETS are explained in more detail in Module 5 on expenditure analysis.

5.1 Reviewing decentralised health budgets

The sub-national level is where most social service delivery takes place. To track nutrition service delivery and its finances, we need to understand both how financing works in the sector or sub-sectors that interests us and how nutrition is integrated into broader sector programmes.

Below are some key questions that can help disentangle nutrition funding in a decentralised context. The questions are divided into two groups: those that apply to the broader health sector, and those that apply to the sub-sector of nutrition programming.

Key questions applying to the health sector will include the following.

1. How are sub-national health sector budgets developed and approved?
2. What are the main sources of finance for the sub-national level in general and what regulations govern them?
3. How does the budget process ensure that there is a recurrent spending provision for the ongoing operation and maintenance of all new capital spending?
4. What are the standard methods/routes for providing funds to the sub-national level?
5. How are sub-national expenditures audited and reported?
6. Are there any significant departures from formal procedures?

This information is relevant across the health sector to inform all sub-national budget analysis.

Key questions applying to nutrition are as follows.

1. Is nutrition programming clearly and comprehensively specified in budget documents?
2. Are all elements of policy for nutrition fully budgeted?
3. What are the existing sources of finance for nutrition at the sub-national level? In particular, what local resources are applied? What conditional grants exist for nutrition? What element of block grants are applied to it? How does this vary geographically?

4. Through what channels do these resources reach the service delivery level? What proportion is spent at higher levels on behalf of implementing agencies? What proportion is goods-in-kind? If nutrition is supported by ODA, how is this channelled and coordinated?
5. Do budgeted funds arrive in full and in a timely manner?
6. How are the expenditures on nutrition audited and reported?

The information required to answer these questions can be found in existing documents. To obtain more detailed answers, it is likely that specific diagnostic analysis will have to be carried out. Sources of information that are most likely to contain useful information are government documents such as:

- policy documents, sector plans or strategies, and local government regulations and laws;
- national budgets (annual and medium-term) and spending reports; and
- local-level budgets (versions that are more detailed than the published version) and spending reports.

The stakeholders typically associated with these exercises are the Ministries of Finance, Planning, Local Government, and Health. The diagnostic tools of interest, which are explained in more detail in Module 5, are the Public Expenditure and Financial Accountability (PEFA), Public Expenditure Reviews (PER), and PETS.

- PEFA reports are usually carried out at the national level but include some useful indicators about sub-national governments, as well as informative commentary. There are also an increasing number of examples of PEFA being carried out at regional or municipal level. Many PEFA indicators are relevant, but two are of particular significance:
 - PI-7: transfers to sub-national governments, which include systems for allocating transfers as well as the timeliness on information on transfers; and
 - PI-10: Fiscal Risk Reporting, specifically 10.2 on monitoring of sub-national governments.

- Basic budget analyses examine budgetary and spending data at all levels of the system. PERs go further and are likely to look into the quality of the PFM system and to assess expenditure performance (mostly efficiency, effectiveness, and equity). PERs examine the relationship between expenditure and other outputs and outcomes, as well as the distribution of resources across population groups. One of the analyses a PER will carry out in a decentralised setting is the allocation of budgets at the sub-national level and the corresponding spending data.
- A PETS has a direct sub-national focus: it

assesses, through empirical enquiry, the effectiveness of the flow of all resources (including goods-in-kind) to support service delivery.

Understanding the detail of how the financing of the health sector works in a decentralised context is a complex task. The type of analysis best suited to obtain a comprehensive overview of nutrition is a PER. Apart from analytical work, however, it is important to engage with the budget process in decentralised systems to find entry points to optimise nutrition budget allocations and expenditure where possible.

6. Concluding remarks

Fiscal decentralisation is about the structure of the state and its relationship to citizens. It is a highly complex area of national reform, but (given its potential to change the way governments organise, fund, and deliver social services) it is critically important for governments to understand. Effective decentralisation, in practice, is heavily influenced by conditions within the particular historical, economic, political, and social context of the country in which it is pursued. Many of the issues surrounding fiscal decentralisation covered in this module have consequences for the allocation of funds to the sub-national level and the equity, efficiency, and effectiveness in budget performance and service delivery results.

This module has discussed the differences between devolved and deconcentrated budgets; the nature and variety of intergovernmental fiscal transfers; the complex balance between central direction and sub-national autonomy; the characteristics of different sectors that influence budgetary arrangements; and common pitfalls (and remedies) in sub-national budget implementation.

In doing so, the module has presented a necessary backdrop for thinking about the importance of sub-national finance in realising improved nutritional outcomes, especially in the context of the COVID-19 pandemic. However, the theory provides only the

basis for understanding the interaction of intergovernmental transactions. To best understand the country context and to provide context-specific remedies for improving nutrition outcomes, it is important to explore the detail of a particular country and to track nutrition financing and implementation throughout the relevant sectors or sub-sectors.

Although complex, some analytical tools (such as a PER or a PETS) can provide valuable insights into the way the budget cycle is implemented across the central and decentralised levels of government, exposing the complexities of the intergovernmental fiscal transfers. No amount of analysis, however, will advance nutrition outcomes. What ultimately matters is engagement with the budgeting and expenditure entry points. Decentralised systems provide many entry points, many more than centralised systems, and all provide opportunities to optimise nutrition expenditure and obtain better nutrition outcomes.



MODULE

7

Universal Health Coverage and Nutrition



Overview of the module

A. Why is this module important?

Universal Health Coverage (UHC) is the dominant health policy framework in Asia. It determines which services will be offered to the entire population with financial protection. It is an ambitious goal and the importance of it is only being emphasised during the COVID-19 pandemic, as the need to invest in health for all becomes clearer than ever.³⁹ High impact nutrition interventions are delivered through the health system. As such, it is important that they are part of the policy and financing of UHC, including part of the health benefit package, if this is made explicit.

B. Why does this matter to nutrition stakeholders?

The inclusion of nutrition interventions in the policy and financing framework of UHC is a good start for ensuring that these services receive adequate financing and are effectively implemented.

C. Learning objectives

By the end of this module, you will be able to:

- better understand that progress in health outcomes is in part due to health financing reform;
- understand the different options for health financing and their effectiveness in pursuing UHC;

- understand the objectives and strategies relating to UHC; and
- understand the importance of UHC for the nutrition agenda.

D. What does this module cover?

This module covers the following:

- progress in health outcomes in Asia;
- health financing indicators across Asia;
- the rationale for introducing UHC;
- the objectives and approaches to UHC;
- the role and characteristics of the health benefit package as part of UHC; and
- the importance of health benefit packages for the nutrition agenda.

E. Reading materials

Core reading

- World Health Organization (WHO) (2019b) 'Primary health care on the road to UHC: monitoring report', WHO, Geneva.
- Glassman, A. et al. (2016) 'Defining a health benefits package: what are the necessary processes?' *Health Systems and Reform* 2(1), pp. 39–50

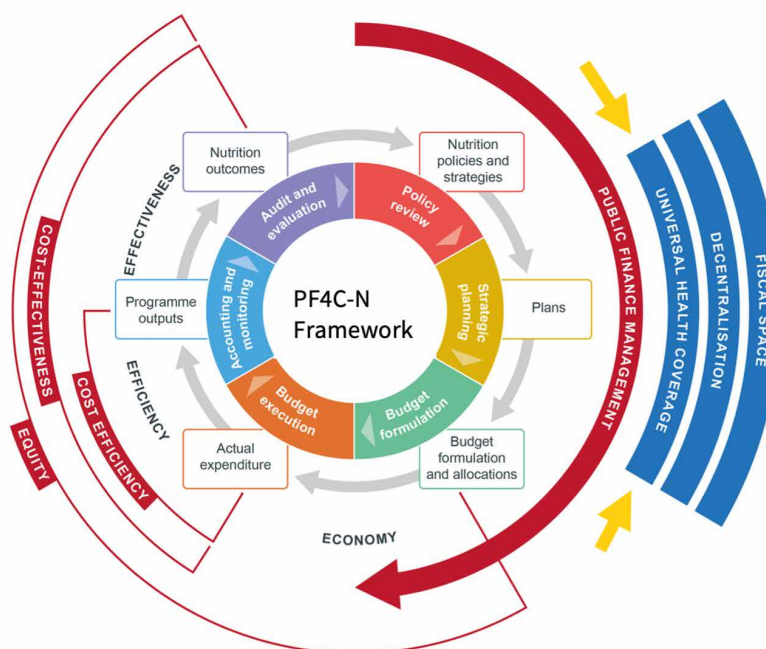
39 World Health Organisation (2021) 'Governments push for Universal Health Coverage as COVID-19 continues to devastate communities and economies', WHO Newsroom, published 18 January. Available at <https://www.who.int/news-room/feature-stories/detail/governments-push-for-universal-health-coverage-as-covid-19-continues-to-devastate-communities-and-economies>.

1. UHC in the PFM results chain

Together with fiscal space and decentralisation, UHC is an overarching feature of the nutrition policy infrastructure. It impacts heavily on the way in which nutrition services are embedded into national policy and the nutrition financing strategy. UHC often presents an opportunity to advance the nutrition

agenda. However, as we will see later in this chapter, nutrition stakeholders often have to lobby hard to include all nutrition services delivered through the health system into the benefit packages that are at the core of the UHC agenda.

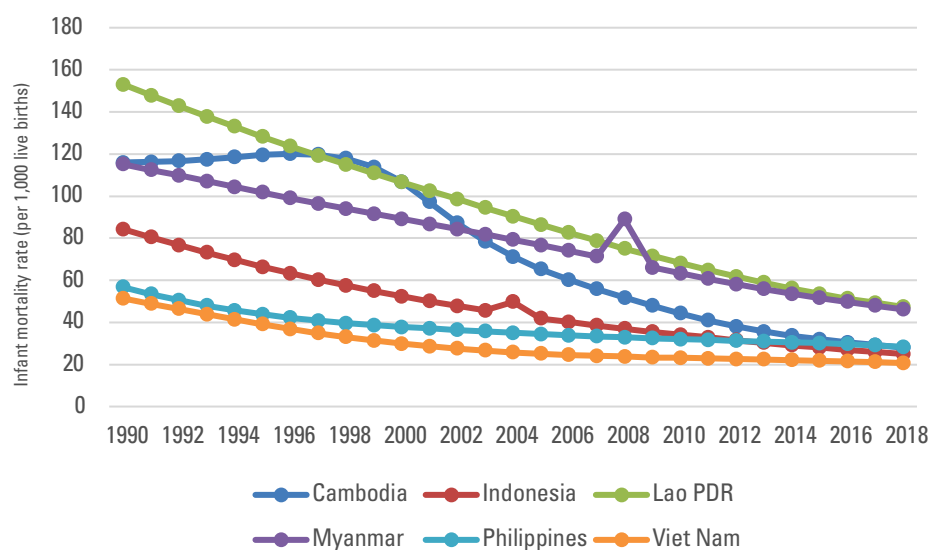
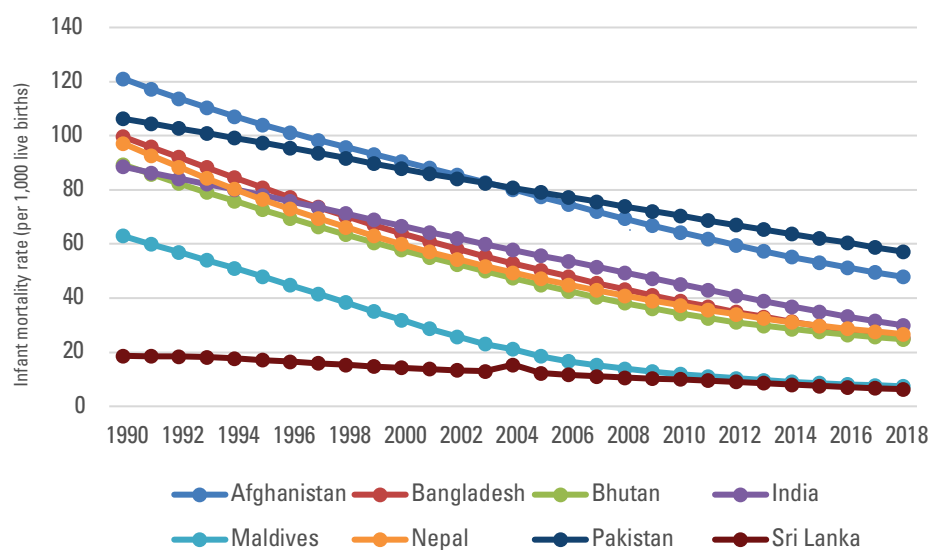
Figure 45: UHC in the Public Finance for Nutrition (PF4C-N) Framework



2. Health outcomes in Asia

In Asia, health outcomes have improved dramatically over the last decades. This is partly in line with its economic development. As gross domestic product (GDP) per capita increases, access to essential hygiene, to safe drinking water and sanitation, to

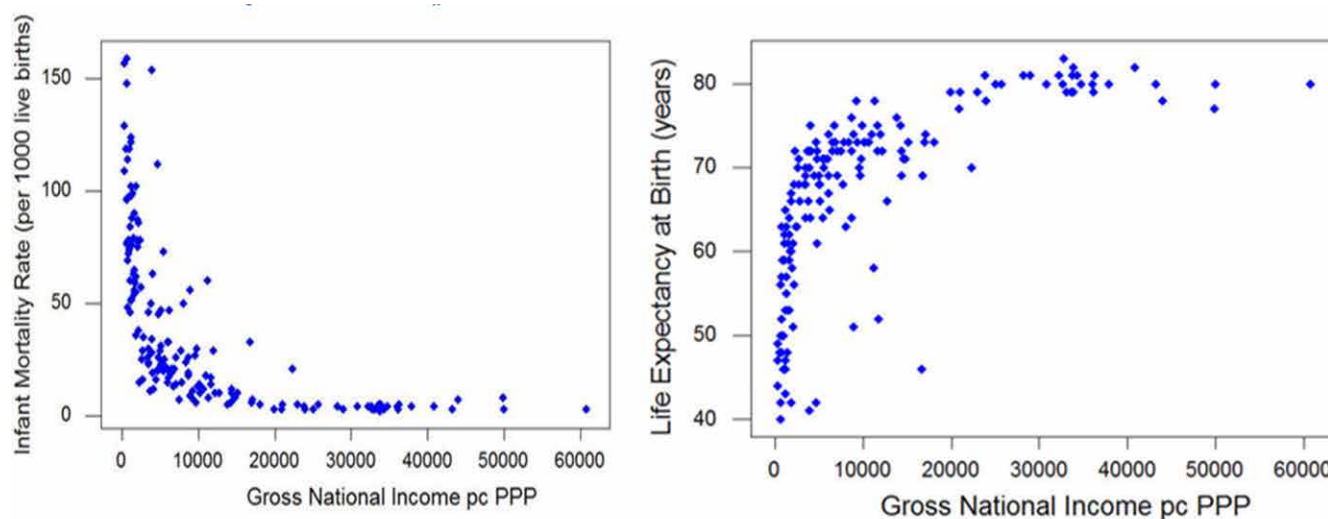
preventative and curative basic healthcare, and to quality of services tends to increase, as do service usage rates across the population. As people become richer and better educated, they access better quality and adequate nutrition.

Figure 46: Infant mortality rates in East Asia, 1990–2018**Figure 47: Infant mortality rates in South Asia, 1990–2018**

Source: World Bank Health, Nutrition, and Population Statistics Databank

However, at economic development below the US \$15,000 per capita mark, there is important variation between countries and some countries do much

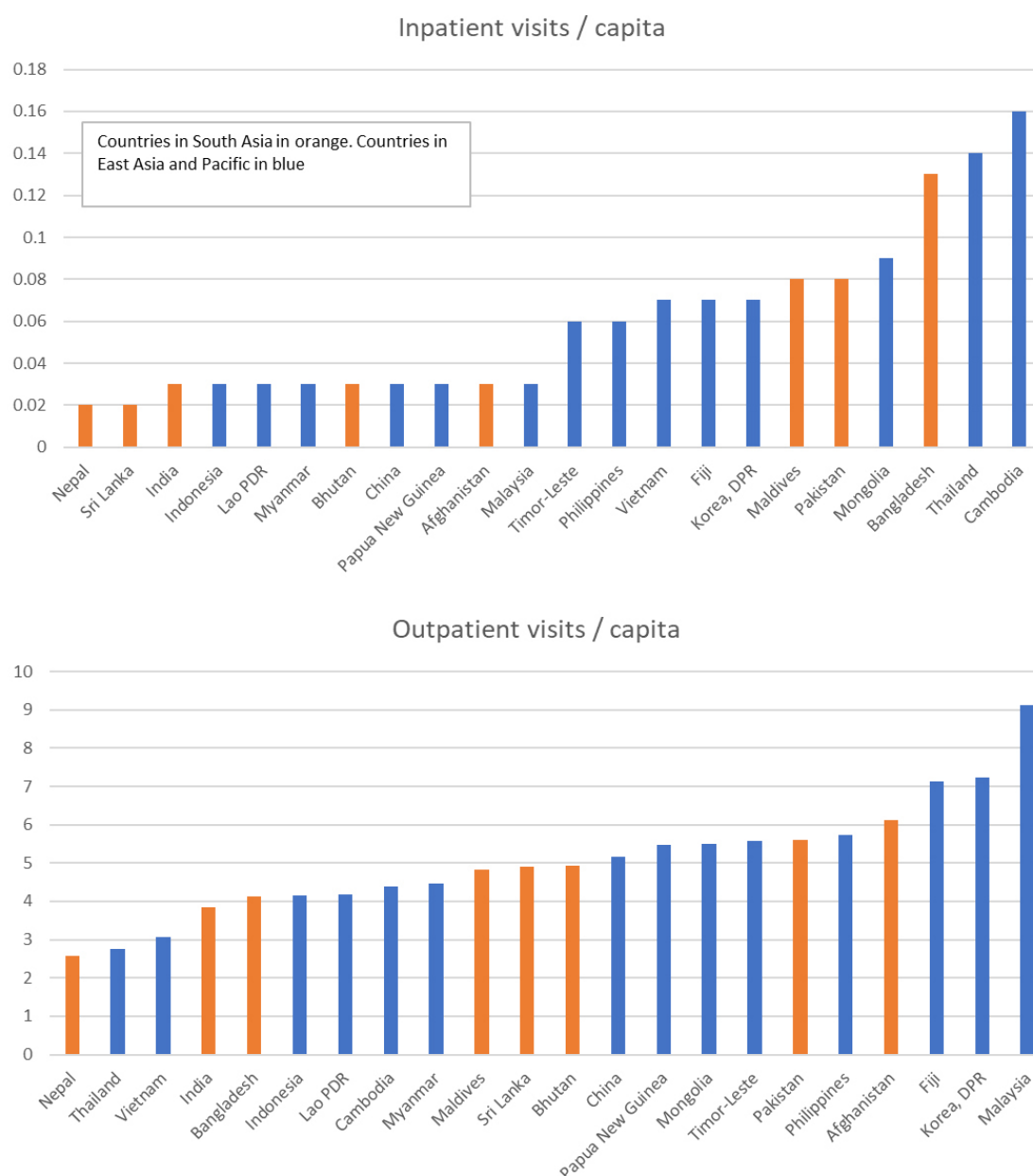
better than others in terms of life expectancy and child mortality. This is shown in the Preston curves.

Figure 48: Preston curves

While it is difficult to pin down all the determinants of health outcome variation (Hay, 2011) at the lower end of the economic development scale, access to quality healthcare is one important factor. Access to health, including nutrition services, is a result of both the supply and the demand side. Simply put, there needs to be 'readiness of care' with enough facilities geographically accessible (i.e. the lower the time and costs needed to go to the facility, the more accessible a facility becomes) to the population and these facilities need to be adequately staffed and equipped with sufficient drugs stocks available. The demand will be driven by a variety of factors including cultural and educational attainment (for example the ability to determine when one is ill) but also, and importantly, the extent to which health facilities and

healthcare is financially accessible. This in turn is a result of the costs of accessing care on the one hand, and the disposable income of households on the other. When costs are 'flat' (i.e. they are the same for all irrespective of wealth), they will represent a higher share of disposable income for poorer households, making care less accessible compared to richer households.

It goes without saying that the nature of the interplay between supply and demand varies significantly between countries, resulting in measurable differences in the extent to which the population accesses healthcare. This is shown, for example, in the outpatient and inpatient visits per capita across the Asia and Pacific region.

Figure 49: Age-standardised outpatient and inpatient visits per capita across Asia and the Pacific⁴⁰

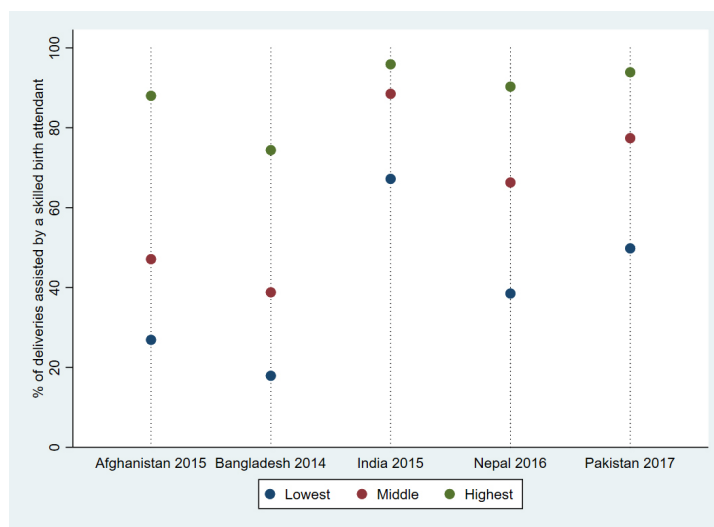
Source: supplementary material from Moses et al. (2019)

Like the differences between countries, there are important differences in access to care within countries, and typically these are articulated across wealth differentials: poorer households will access care less than richer households. This is illustrated by the differential access to skilled birth attendants, for

example in Nepal, where mothers in the richest quintile are more than three times as likely to deliver babies with a skilled birth attendant than mothers in the poorest quintile. The data in Afghanistan, India, Pakistan, and Bangladesh show a similar pattern.

⁴⁰ Outpatient utilisation rate is the annual number of visits per capita to a health facility that did not result in admission. Inpatient utilisation rate is defined as the annual number of admissions per capita for one night or more into a health facility. Data sources were compiled from a systematic review of surveys and administrative data within the Global Health Data Exchange. All data sources were nationally or sub-nationally representative. Bayesian hierarchical meta-regression methods were used to estimate the variable and inconsistencies in recall periods between surveys were fixed.

Figure 50: Inequalities between richest, middle, and poorest quintiles in delivery assisted by skilled birth attendant in selected South Asian countries



Source: Adapted from Zaidi *et al.* (2017) with updated data from DHSCompiler

As explained in Module 1, ‘Situating the course’, there are several reasons that explain why populations in need of nutrition services do not access them. These reasons are:

- primary health services including nutrition interventions are not offered as part of the primary health care package to specific population groups (for example those living in remote rural areas);
- primary health services are available, but nutrition services are not, or not to all population groups; and
- primary health and nutrition services are available, but they are not accessible, for a variety of reasons, the most important often being financial barriers.

After geographical inaccessibility (health facilities are too far from the population), financial barriers remain one of the most important factors determining access to care, and this has now been widely documented across the region. In China, 30% to 50% of people did not obtain needed treatment because of financial difficulties, the proportion being higher in rural areas and smaller cities (Zhao, 2006). In addition, financial difficulties to access care often interact with gender. In Cambodia, Nepal, the

Philippines, and the Solomon Islands, more than three women in four with the lowest household income reported difficulties in accessing healthcare due to financial reasons. In Cambodia, over 40% of women from households with the highest income also have problems with access to care for financial reasons, while in India, Indonesia, and Pakistan, less than one woman in 10 from households in the richest quintile have unmet care needs for financial reasons (OECD and WHO, 2018).

Financial barriers to accessing care come in the form of direct and indirect costs. Direct costs are any costs associated with the use of care at the facility. They can be formal (i.e. user fees; drug costs; laboratory test costs) or they can be informal (i.e. under-the-counter payments; payments to speed up the results). Indirect costs are those costs not spent on care but nevertheless necessary to obtain it such as transport costs, overnight stay costs, or the lost income of the person that seeks care (opportunity cost). In the context of the COVID-19 pandemic, which has seen healthcare and transportation systems interrupted, and many households experience declining incomes, these barriers have only been heightened – especially for the most vulnerable.⁴¹

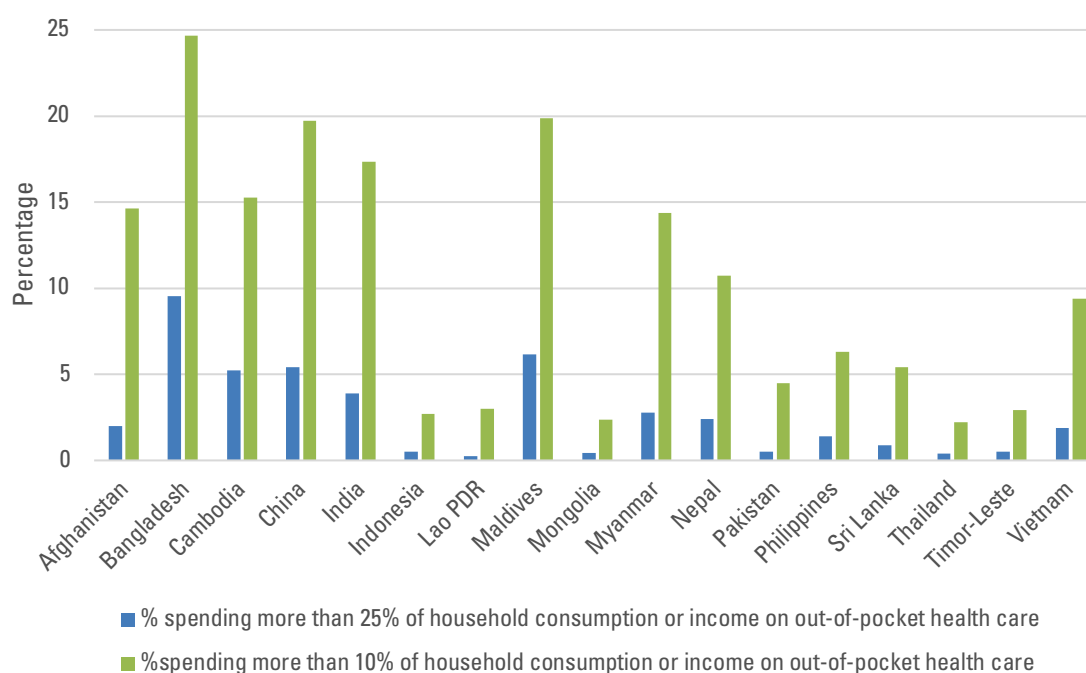
41 R. Hussain and S. Arif (2021). ‘Universal health coverage and COVID-19: recent developments and implications’, *Journal of Pharmaceutical Policy and Practice*, 14:23.

Most basic primary health services are intended to be free at the point of service. The reality is, however, that often they are not, and even small contributions (for example for birth registration cards) will deter women from seeking pre- and post-natal care. Similarly, the prospect of having to pay for part of the drugs or diagnostics related to assisted delivery might deter women from seeking not only assisted delivery but also pre- and post-natal care, thus depriving them of the opportunity of receiving nutrition services. While nutrition services themselves might be free, costs associated with the primary healthcare services to which they are attached will erect a financial barrier to accessing these services.

Financial barriers lead to seeking less care than required and seeking care too late, which in turn can lead to higher costs when seeking care. But sometimes accessing healthcare is so important that households will impoverish themselves for it. Figure 51 shows the share of the population which pays more than 10% and 25% of their consumption or disposable income to healthcare in Asia, pushing a considerable number of households under the poverty line.

Again, this might not directly apply to nutrition services, but the fact that a contact with the health system is associated with the possibility of catastrophic expenditure might deter poorer households from accessing nutrition services, even if such services are themselves free.

Figure 51: Share of the population paying more than 10% and 25% of their disposable income towards healthcare expenditure



Source: Last available year from World Bank Health, Nutrition, and Population Statistics Databank (accessed 15 January 2020)

A large number of people in Asia are pushed into poverty because of health expenditure. While 2.1% of the population (72.9 million people) find themselves being pushed below the poverty line of US \$1.9 per capita per day every year because of out-of-pocket expenditure on health, this is 79.1

million people if the poverty line is set at US \$3.2 per capita per day (see Table 18). As COVID-19 continues to disrupt economies and livelihoods worldwide, more people have had their incomes fall and thus are more vulnerable to medical impoverishment and experiencing catastrophic expenditure.⁴²

Table 18: Share of the population falling under the US \$1.9 or the US \$3.2 per capita a day poverty line due to out-of-pocket health expenditure

Region	Percentage of population				Number of people (millions)			
	2000	2005	2010	2015	2000	2005	2010	2015
US \$1.90 a day poverty line								
World	2.0	1.8	1.5	1.2	123.9	116.8	103.4	89.7
Asia	2.6	2.6	2.1	1.7	97.3	101.4	85.4	72.7
US \$3.20 a day poverty line								
World	1.5	1.8	1.7	1.4	93.0	118.9	119.5	98.8
Asia	1.9	2.5	2.3	1.8	70.0	98.0	96.1	79.1

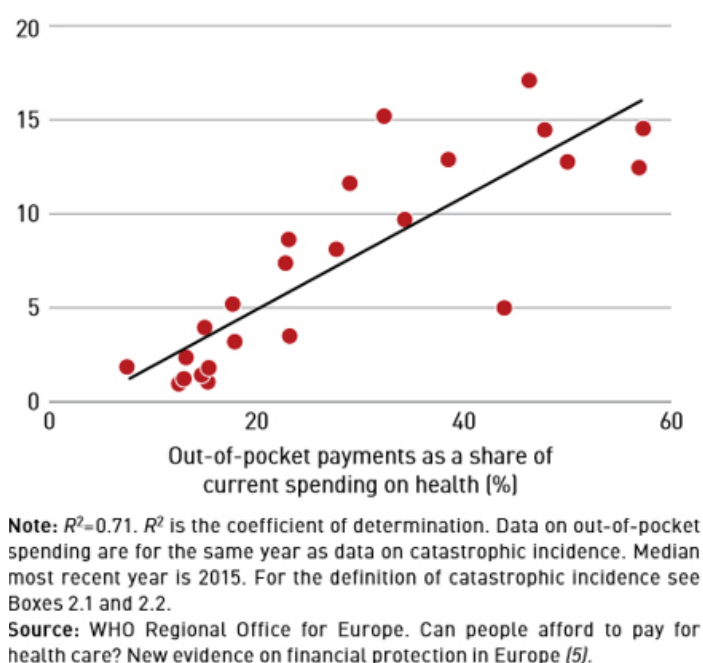
Source: Reproduced from WHO (2019a), licence: [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/)

In low- and middle-income countries, there is a lack of up-to-date evidence about catastrophic health expenditure and the number of households pushed into poverty because of health expenditure. A shorthand proxy indicator for catastrophic health

expenditure is the share of out-of-pocket expenditure in total health expenditure (THE). This is shown by the positive association between these two variables in the graph below. The data are from the WHO Europe region but the pattern is believed to hold elsewhere.

⁴² According to UNICEF estimates, an additional 142 million children are estimated to have fallen into monetary poverty in 2020 alone (UNICEF 2020, Children in monetary poor households and COVID-19: Technical Note, published online November. Available at <<https://data.unicef.org/resources/children-in-monetary-poor-households-and-covid-19/>>.

Figure 52: Incidence of catastrophic health spending and the share of out-of-pocket spending in current health spending

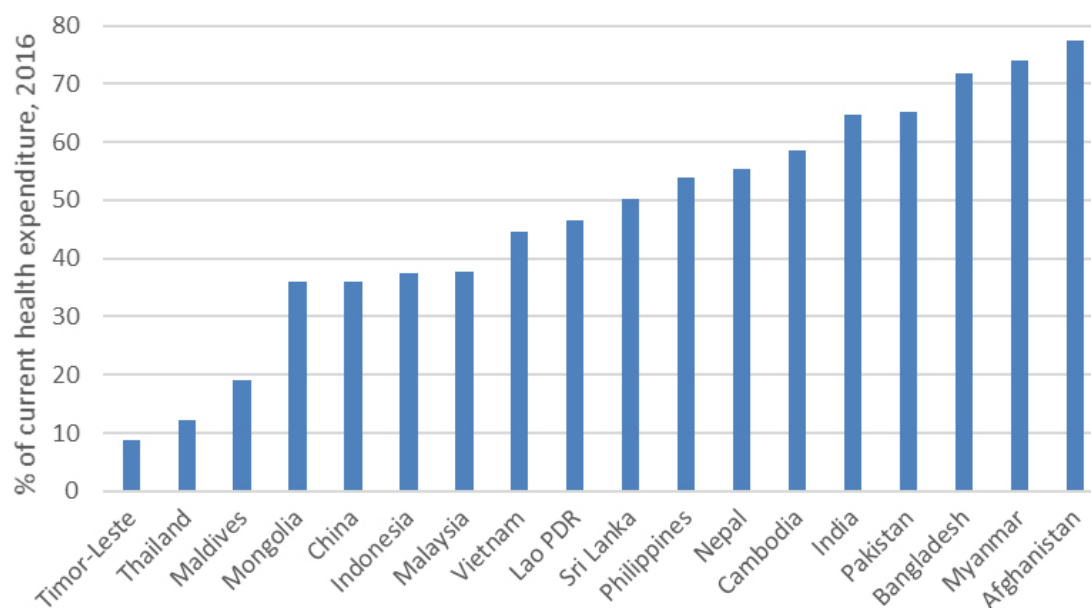


Source: WHO (2019b), licence: CC BY-NC-SA 3.0 IGO

Out-of-pocket expenditure in Asia generally ranges from just below 10% to almost 80%. WHO recommends that, to avoid unacceptable levels of catastrophic health expenditure, out-of-pocket expenditure as a share of total expenditure should not exceed 20%.

To avoid catastrophic health expenditure, health systems provide access to care with financial protection, i.e. in a way that people do not impoverish themselves when seeking care. In low- and middle-income countries, financial protection is obtained by abolishing user fees (or reducing them to very low

levels) or by providing people access to social or, in some cases, community-based health insurance (CBHI). There is strong evidence from the region that health insurance can significantly increase financial protection. In the Philippines and Thailand, targeting policies have also shown that the poor and those in the informal sector can be reached and provided with insurance coverage. Empirical evidence generally suggests that private (commercial, for-profit) health insurance is not a policy instrument to improve financial protection in light of obtaining UHC (more on this below).

Figure 53: Out-of-pocket expenditure as a share of THE in selected countries in Asia, 2016

Source: World Bank Health, Nutrition, and Population Statistics Databank (accessed 15 January 2020)

Most of the data and empirical evidence presented above concern health and health expenditure. Even if nutrition services delivered through the health sector are free at the point of service, the same tendencies and causal relationship between financial barriers, access, and poverty will apply, in part, to nutrition services, and more so to poorer households. Table 19 provides further evidence of this relationship. The last column in the table shows that the share of women who report having problems finding money for treatment for themselves when they are ill ranges from approximately 15%–67% across countries in

Asia. The first column shows that the share of pregnant women receiving pre-natal care with at least four visits ranges from as low as 17.8% to 86.5%. While some women do not enjoy assisted delivery because these services are not easily available where they live, others will not access them because of the financial barriers associated with assisted delivery. This then implies that financial barriers to accessing health services also, sometimes indirectly, impacts the accessibility of those nutrition services that are associated with them.

Table 19: Coverage of ANC services and barriers to accessing healthcare

Country (Year)	Pregnant women receiving prenatal care of at least four visits (%)	Women reporting having problems getting money for treatment for themselves when sick (%)
East Asia		
Cambodia (2014)	75.6	64.4
Indonesia (2013, 2017)	83.5	15.1
Myanmar (2016)	58.6	34
Philippines (2017)	86.5	45.3
Timor-Leste (2016)	76.7	37.8
South Asia		
Afghanistan (2015)	17.8	66.7
India (2016)	51.2	25.4
Maldives (2017)	81.6	19.8
Nepal (2016)	69.4	54.9
Pakistan (2018)	51.4	30.4

Source: Demographic Health Surveys StatCompiler

The evidence above shows that developing policy interventions to improve access to nutrition and health services need to consider the specificities of the environment. There is so much variability across the Asian region that there is no one-size-fits-all approach. However, at the same time, extensive

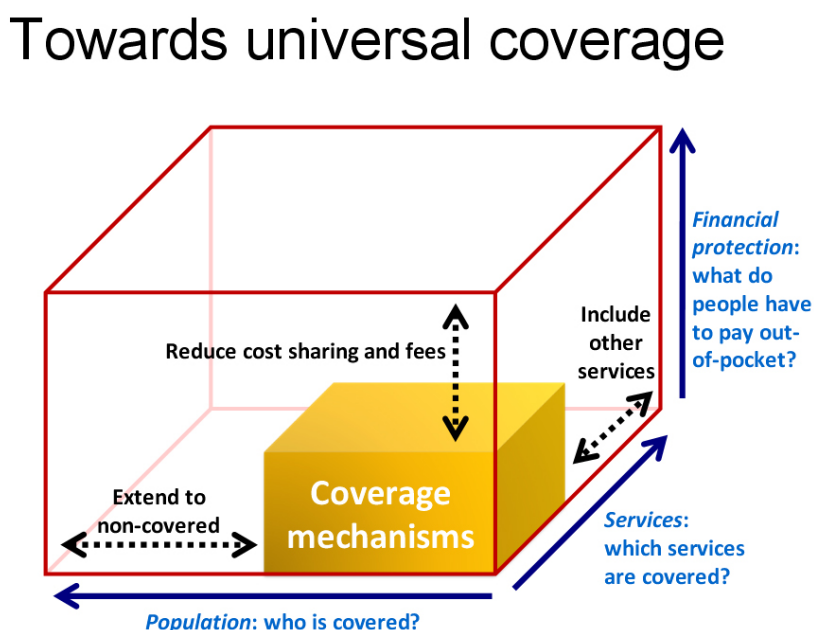
public health research over many decades suggests that some common policy dimensions must underpin any health policy geared towards offering the entire population access to a basic package of essential services. That is what UHC is about.

3. What is UHC?

UHC has been defined by the WHO as ensuring that 'all people obtain the health services they need without suffering financial hardship when paying for them' (World Health Assembly Resolution 58.33,

2005). The three dimensions of UHC (population coverage, package of services provided, and level of financial protection) are often represented through the UHC cube (Figure 54).

Figure 54: The UHC cube



Source: WHO (2010)

The UHC agenda, through its recognition of the context specificity of each of the three dimensions (population coverage, service coverage, and level of financial protection) and the specificity of the path through which each of these dimensions could be extended, can be seen as an overly consensual tool, in which anything and everything could be thrown. Indeed, a country with out-of-pocket representing

70% of its THE could as easily claim progress towards UHC as a country with out-of-pocket representing only 10% of THE, to take one dimension as an example. As such, the UHC cube has been criticised for being more of a Pandora's box than a real answer to improving people's access to good-quality care.

Box 16 Implementing UHC: best practice from Thailand

Despite considerable investment in health since the 1970s, in 2000 Thailand continued to face massive challenges in healthcare delivery. Approximately 30% of the population (18 million people) had neither health insurance nor guaranteed access to free medical care. Out-of-pocket payments accounted for a third of THE and these impacted poor households disproportionately. Thailand adopted a UHC scheme in April 2001, with public primary healthcare facilities as the main providers of healthcare.

The main objectives of the UHC scheme were to focus on promoting health, prevention, and care while emphasising the role of primary healthcare. In addition, equity was a key consideration for the government in an attempt to ensure that health subsidies were progressive, largely benefiting the poor and ensuring all citizens were protected against financial risks in obtaining healthcare.

The UHC had three main features:

1. a tax-financed scheme free at the point of service chosen based on the progressivity of the tax system in Thailand, where the rich pay a much larger proportion of taxes than the poor;
2. a comprehensive benefit package with a primary care focus covering outpatient, inpatient, and accident emergency services, dental care, diagnostics, and medical supplies; and
3. a fixed annual budget with a cap on provider payments.

Despite increased general government expenditure on health between 2001 and 2008 from US \$1.9 billion to US \$7.4 billion (a 76% real increase), health expenditure as a percentage of GDP remained between 3% and 4%.

The scheme encountered significant challenges initially, in part caused by the move from supply-side financing (where the Ministry of Health allocated budgets to its administrative units and service tiers) to demand-side financing and organisational reforms required within the Ministry of Health, but is nevertheless seen as being very successful, not least in reducing out-of-pocket payments by households from 33% of total expenditure to 15% in 2008.

Yet this is doing the UHC drive a disservice. What the UHC agenda clearly recognises is the common ultimate objective of offering good-quality services to all. It also recognises that every country will be at a different stage on this path, offering more or fewer services to more or fewer people with more or less financial protection. The UHC cube offers a clear structured approach to making this happen.

First, the benefit package must be defined, as no country can afford to pay for all services. Choices need to be made through a combination of technical judgements (such as the most cost-effective

interventions) and political settlements, as removing any intervention from an existing package is an extremely contentious exercise.

Second, who should benefit? 'Universal' means that 100% of the population should be able to access services, yet this is a near-impossible feat. Many countries start with 'low-hanging fruits', i.e. the formal sector employees, and slowly extend coverage to other population groups. The most vulnerable are often the hardest to reach and the last to be included unless a specific equity goal drives the country's health financing reforms.

Third and finally, what should be the level of financial protection? A central aim of UHC is to ensure that people do not face financial hardship in the process of seeking care, defined by the level of out-of-pocket. Yet in many Asian countries today, out-of-pocket continues to represent a large proportion of THE, as shown in Figure 9. An explicit goal of UHC is therefore the reduction of out-of-pocket, and specifically of user fees. This is one of the central challenges of achieving UHC: how to replace user fees.

Replacing user fees leads to a broader question: how to finance the great ambition of UHC? Funds, or rather fiscal space, can come from four distinct sources: increased aid allocated to health; increased government allocation to health and/ or increased domestic resource mobilisation (the focus of this section); borrowing for health; or improved technical efficiency.

Domestically, UHC can be financed through various sources: public (taxation and social/national health insurance) and/or private (user fees, CBHI, private health insurance, or medical savings account⁴³). We have discussed these in the module on fiscal space, but apply these briefly to the question of UHC specifically.

- Taxation: generally speaking, tax-financed systems offer the largest potential for revenue raising, as the tax base is very large (anything from corporate taxation to property taxes, to value-added tax [VAT], etc.). This large revenue base also offers the greatest potential for pooling, hence of cross-subsidisation between the rich (who should pay the largest proportion of the taxes if the system is progressive) and the poor (who should pay a lesser proportion). In low-income countries particularly, direct taxation is often seen as hard to enforce and collect and International Monetary Fund advice for example has focused on the need to prioritise VAT. Literature suggests there may be further avenues to explore around taxation even in low-income countries, and that choosing the VAT route may be too regressive

and restrictive an approach (DiJohn, 2010; McIntyre and Meheus, 2014).

- Social or national health insurance⁴⁴ is mainly financed through a tax on payroll, but often complemented by public subsidies. Resources are pooled ideally at the national level, offering some level of cross-subsidisation between people who have contributed. In low- and middle-income countries with large informal sectors unable to take part in social health insurance, this leads to a large proportion of the population remaining uncovered.

Direct taxation and/or national health insurance systems are considered the most progressive generally, as they overall ensure that the richer the individual, the more he/she pays as a proportion of their revenue.⁴⁵ Taxation and social/national health insurance also dissociate the episode of ill health from the payment itself, which offers the greatest potential for financial protection. These two mechanisms, either together or separately, have been recognised as the most suitable for reaching UHC (WHO, 2010).

- Private health insurance: insurance for those able to pay the premium. While it can be useful in providing secondary or tertiary level care for those who can afford the premium, it is of little relevance to countries aiming to reach UHC of a basic package of services for the simple reason that it does not cover the entire population and therefore is not aligned with the fundamental principles of UHC (WHO, 2010).
- CBHI: any scheme managed and operated by an organisation other than a government or private for-profit company that provides risk pooling to cover all or part of the costs of healthcare services—usually voluntary. As argued before, success with CBHI has been mixed and it is generally considered to be an intermediary step towards UHC. One of the biggest challenges with CBHI is that contributions are voluntary or, if they are not, difficult to enforce. Pools tend also to be small, resources mobilised limited, and poorer people

⁴³ Medical savings accounts have only been used in Singapore. As they are so rare, we will not discuss them here.

⁴⁴ These two terms (social health insurance and national health insurance) are used interchangeably in the literature. We here will use social health insurance to mean either.

⁴⁵ There are of course nuances to this statement, as both systems can be made relatively less progressive through tax ceilings (for example) or exemptions. This is, however, beyond the scope of this paper.

excluded. However, in countries with large informal segments of the population, they can provide a temporary bridge towards a future where populations are covered with mandatory health insurance or tax contributions.

- User fees are any payment at the point of use by patients. User fees are meant to raise much-needed funds to finance healthcare and reduce frivolous demand. The overwhelming consensus for the past 10 years has been that user fees are not only unable to raise sufficient funds to pay for healthcare but also unable to reduce frivolous demand, particularly of the poor. More importantly, they also have an extremely negative impact on the poor's ability to access care (WHO, 2010). The debate about user fees has today moved on from whether to remove user fees to how to remove them (McPake et al., 2011). This has become a particularly pressing question in the context of UHC, and, as highlighted above, in the realisation that many low- to middle-income countries still greatly rely on user fees to finance their health sector.

In conclusion, evidence shows that a journey towards UHC implies the gradual removal of user fees and a replacement by national level collection and pooling mechanisms, such as taxation and/or social health insurance (WHO, 2010).

UHC is a societal goal that needs the backing of the Ministry of Health and the Ministry of Finance to make it happen. Only through collaboration can these institutions solve the fiscal space conundrum, which in practice means recognising the need for additional resources for health (without which UHC will remain an empty political promise), identifying progressive ways of raising domestic resources (the remit of both the Ministry of Health and the Ministry of Finance), and getting more health for the money through better spending of these resources (the remit of the Ministry of Health). But one of the first questions of importance to UHC, which determines its affordability, is: what is the essential package of services that is guaranteed under UHC? This is what the next section is about.

4. Health benefit packages

The essential package of care or health benefit package is first and foremost designed to provide the best outcome for the money available. It will therefore tend to, or at least should, prioritise prevention, health promotion, and primary care, as these can lead to better outcomes compared to a system with greater emphasis on hospital facilities. Sri Lanka is one example of a system where focus on these elements has resulted in a better outcome to the population with relatively limited available health funding.

The question regarding the development of an essential health benefit package as part of a UHC policy is to define, often explicitly, a set of services that can be sustainably financed and provided within the circumstances of a country. Glassman (2016) argues that this is best done explicitly so that citizens can be made aware of what services are available.

As resources are limited in most countries, setting an essential healthcare package involves hard political choices and policymakers will come under pressure from various patient groups and suppliers of technologies and services. That is why—as a start—it is best to make these decisions based on the best possible evidence about impact and cost, using certain rules and criteria as part of a transparent process. Doing so allows for a quality debate on the objectives of the health system and the use of scarce financial resources, while creating expectations and accountability.

Cost-effectiveness analysis (CEA), discussed in more depth in Module 8, provides an excellent starting base to identify services for inclusion in essential packages as part of a UHC policy. However, CEA as a basis for choice is often 'enhanced' by equity and political considerations.

Essential healthcare benefit packages for social health insurance schemes can be an important vehicle for the nutrition agenda. If included and well-funded, then nutrition services benefit from the priority policy and funding attention offered to UHC. When countries go through an exercise of developing an essential package, nutrition stakeholders should have great interest in being associated with the exercise. As nutrition interventions tend to be highly cost-effective compared to other health services, they should in principle be automatically included in the benefit package. However, there is ample evidence that this is not always the case.

In Southeast Asia, many benefit packages in health insurance do not include nutrition services (severe acute malnutrition (SAM) treatment in the Philippines is a notable exception). In Vietnam, advocacy to include nutrition counselling and treatment services into the national insurance package failed because the products are not registered as medicines. Adding acute malnutrition treatment commodities on Essential Medicines Lists requires governments to allocate adequate budget to purchasing these commodities. This in turn also ensures that there is budget allocated for nutrition services (Du Châtelet, 2017).

There is no simple set of guiding principles to ensuring that nutrition interventions are duly included in health benefit packages as part of a developing policy on UHC or health insurance, but here are some avenues.

- Nutrition services are mostly part of primary healthcare packages related to pre-natal pregnancy care, delivery care, post-natal care, and childcare. A first port of call would be to examine whether these packages include associated nutrition services, and if not to identify the avenue through which these might be included. While health benefit packages are formally composed of individual interventions, the latter are often packages in themselves in

practice, such as 'pre-natal care' or even 'all services delivered at the health post or primary healthcare facility'. Rather than thinking of 'adding' a specific nutrition service to the health benefit package, in this case the approach would be to ensure that the primary healthcare facilities duly include nutrition interventions. This will require working with primary health or district healthcare departments at the Ministry of Health.

- In those cases where health benefit packages are highly detailed, which might be the case in countries with developed health insurance systems, it will be important to assess whether individual nutrition interventions are part of the package and covered by the health insurance. If not, it is important to understand why this should be the case. This may be for a variety of reasons, each of which would need to have its own approach to address them. For example, as was the case in Vietnam, services that include products that are not on the Essential Medicines List might not be considered health products and on that basis might be difficult to include in the health benefit package without changing the national health insurance regulation. Other reasons might have to do with the fact that the coverage of nutrition interventions is not consistent across the population covered by the health insurance, so that some but not all could access them. Health insurance fund administrators might, in this case, first want to see the services offered in the majority of facilities they cover before including them in the benefit package.

In any case, nutrition stakeholders should be pushing for nutrition services to be included into the health benefit packages as part of UHC roll-out. If they are not, they should try to identify the reasons why and develop tailored actions to try and redress the situation.

Box 17**Inclusion of nutrition interventions in the health insurance benefit package of the Philippines**

Even though the Philippines is a middle-income country with high rates of economic growth, undernutrition is a significant public health concern, with nutrition indicators worsening over the years. One-third of children under the age of five are stunted and 7% are wasted. The rates of malnutrition are particularly high among the poorest quintile, with 49% of children in poorest households stunted. Access to health and nutrition services is low among the poorest households in the country, worsened by recurrent disasters (e.g. the super-typhoon Haiyan in 2013) and conflict. Out-of-pocket expenditure as a proportion of THE is one of the highest in East Asia at 54%. In 2014, a World Bank assessment classified the Philippines as a country where the government's health expenditure is significantly pro-rich.

The UHC Bill became law in the Philippines in 2019. Under this law, all Filipino citizens are enrolled in the National Health Insurance Program. One of the principles of the UHC Bill is to adopt a 'health care model that provides are Filipinos access to a comprehensive set of quality and cost-effective, promotive, preventive, curative, rehabilitative, and palliative health services without causing financial hardship, and prioritises the needs of the population who cannot afford such services'. The policy aims at a primary care-focused health system and at strengthening frontline health services. Population health-based services are to be financed by the national government and to be provided free of charge, while individual-based health services will be financed by insurance schemes such as social health insurance, private health insurance, and private health management plans. Under the act, there will be no charges for services provided in basic or ward accommodation and all citizens will be eligible for the health benefit package.

In November 2018, the First 1,000 Days Bill became law in the Philippines. Under this law, care for pregnant and lactating women and their child is guaranteed from the start of the pregnancy until the child is two years old. Priority is given to mothers and children in disaster-prone, conflict-ridden, and remote areas, as well as to poor and marginalised communities. Investments will be made into evidence-based nutrition interventions to institutionalise and scale them up to reach all pregnant and lactating women and all children under two to reduce stunting among children and infant and maternal mortality. The law ensures a policy environment conducive to nutrition improvement through meaningful, active, and sustained participation of national government agencies (the Department of Health and the National Nutrition Council), as well as local government units, civil society, and the private sector. Under the Act, local government units are encouraged to integrate nutrition programmes into their local plans and investments for health and nutrition. Services will be provided at the lowest administrative level (Barangay) and delivered through Barangay Nutrition Scholars and Barangay Health Workers. According to the Secretary of the Department of Health, 'This law will complement the much-awaited Universal Health Care Law to further boost the country's health status on our way to make Filipinos the healthiest in Southeast Asia by 2022 and in Asia in 2040.'

The law came after continued advocacy and support for international development partners such as UNICEF, local organisations such as the Philippine Legislators' Committee on Population and Development, and the Philippine Coalition of Advocates for Nutrition.

Following the implementation of a Community-Based Management of Acute Malnutrition (CMAM) programme by the nutrition cluster as part of the response to super-typhoon Haiyan in 2013, a CMAM working group led by the Department of Health was set up. The objective was to develop national guidelines and protocols for SAM management, which was highlighted as a shortfall during the typhoon response. In 2015, the Department of Health approved the National Guidelines for the Management of SAM for children under five years and consequently acute malnutrition management programmes were integrated into routine services provided by the health system. A phased roll-out approach was planned and in the following year; US \$3.3 million was allocated in the Department of Health's investment plans for the scale-up of SAM management programmes in 16 provinces, including complete financing of SAM treatment supplies (e.g. Ready-to-Use Therapeutic Food). The 1,000 Days Act passed in 2018, included SAM and Moderate Acute Malnutrition management programmes as one of the services to be provided at the community level to children aged 6–24 months, institutionalising the CMAM programme as part of the health systems services package for mothers and children.

Under the revised guidelines, treatment of malnutrition is included in the PhilHealth benefit package. Primary healthcare facilities that provide SAM treatment services can avail reimbursements if they meet the accreditation requirements set by PhilHealth and the treatment supplies used are part of the Essential Medicines List (Philippine National Drug Formulary).

Sources: Garg et al. (2016); Republic of the Philippines (2018a, 2018b); Philippines Department of Health (2015, 2018); World Bank Health, Nutrition, and Population Databank

5. Concluding remarks

Asia has made tremendous progress in health outcomes over the last three decades, and this shows in higher life expectancy and lower infant mortality rates. This progress can be explained by better access to safe drinking water, better education, increased access to essential primary healthcare, and adequate nutrition. In some countries, primary healthcare and nutrition services do not reach the entire population, in which case nutrition stakeholders must advocate for increased service coverage.

However, when services are available, a significant portion of the population across Asia still faces detrimental financial barriers to accessing pre-natal, delivery, post-natal, and child care, and therefore also to the associated nutrition interventions—even if they themselves might be free at the point of service. This is because out-of-pocket expenditure as a share of THE remains too high in many countries in the region.

To remedy this situation, most countries in the region pursue a UHC health policy, which means they aim to guarantee the entire population access to a quality package of services without becoming impoverished in the act of seeking care. This is obtained by funding the provision of these essential services by revenue obtained from taxed or from mandatory social health insurance contributions (or quasi-taxes).

In the wake of the COVID-19 pandemic, a unique opportunity has emerged for countries to align their efforts towards the pandemic response to ensure that UHC is prioritised in future. International bodies, such as the World Bank, are calling on countries to increase public spending on health and nutrition post-COVID in order to support population health, welfare, and invigorate the economy.⁴⁶

Many countries are in the process of developing, or reviewing, the health benefit package as part of the UHC policy. This offers an important moment for nutrition stakeholders to ensure that nutrition services are incorporated as part of the health benefit package, because as such they would be well-funded and offered to the population as a whole on affordable terms.



46 A. Tandon and S. Osornprasop (2021). 'Using the COVID-19 Response to Advance Health Coverage', World Bank Blogs, published 2 June. Available at < <https://blogs.worldbank.org/health/using-covid-19-response-advance-universal-health-coverage>>.



MODULE

8

Investment Cases and Value for Money in Nutrition



Overview of the module

A. Why is this module important?

Value for money (VfM) analyses can help to answer the following question: are current nutrition programmes delivered economically, efficiently, and effectively? In other words, what is the performance of public expenditure on nutrition? This module will introduce you to the tools available to measure and maximise the efficiency and effectiveness of spending on nutrition.

VfM analysis is a specific aspect of expenditure analysis relating to the links between budget inputs, outputs, and outcomes on the left hand side of the Results Chain in Module 1.

B. Why does this matter to nutrition stakeholders?

The rationale for VfM analysis is straightforward: governments (and donors) have limited resources, which they need to spend as efficiently and as effectively as possible to achieve public policy goals—in other words to achieve the ‘biggest bang for the buck’. As COVID-19 shrinks fiscal space and constrains public budgets, maximising the efficiency and effectiveness of public spending is critical for maintaining, and improving, nutrition outcomes.

Although few developing countries have institutionalised VfM analysis, advocacy based on the findings can be extremely powerful in influencing government spending decisions. Evidence of good VfM can sway an argument for scaling up a programme, protecting budgets against COVID-19 induced cuts, or for introducing a completely new programme. Even when budgets are tight and it is impossible to increase aggregate public expenditure, better results can be achieved by improving VfM. This can be done either by improving the VfM of individual programmes or by shifting resources from programmes with poor VfM to others with better VfM. By providing a justification for expenditure reallocation (one of the corners of the ‘fiscal diamond’ discussed in Module 4), VfM analysis can help create fiscal space for high-performing programmes.

VfM analysis is also increasingly a prerequisite for aid decisions. Many donors now require VfM analysis before approving aid allocations; they need to show that aid is well spent in terms of responding to domestic political pressures regarding aid budgets.

We will see that most nutrition interventions delivered through the health system are highly cost-effective but that the efficiency and economy in their delivery can often be improved.

C. Learning objectives

By the end of this module, you will be able to:

- explain the concepts, terminology, and tools of VfM analysis;
- use VfM analysis to help shape policy, programme, and budget choices; and
- decide what type of VfM analysis is most useful and practical in a given context.

D. What does this module cover?

This module covers the following:

- key concepts related to VfM analysis and their links to results-based management;
- common analytical methods, including their uses and limitations, including:
 - cost-efficiency analysis;
 - cost-effectiveness analysis;
 - cost–benefit analysis; and
 - cost of inaction analysis; and
- applying these methods to gauge the quality of expenditures on nutrition and ultimately to influence policy choices, budget allocations, and the quality of service delivery.

E. Reading materials

Core reading

- Shekar, M., Kakietek, J., Dayton Eberwein, J., and Walters, D. (2017) 'An investment framework for nutrition: reaching the global targets for stunting, anaemia, breastfeeding and wasting', World Bank Group, Washington DC, available at: <https://openknowledge.worldbank.org/handle/10986/26069>. Read the Executive Summary (8 pages).

Suggestions for further reading are given at the end of the module.

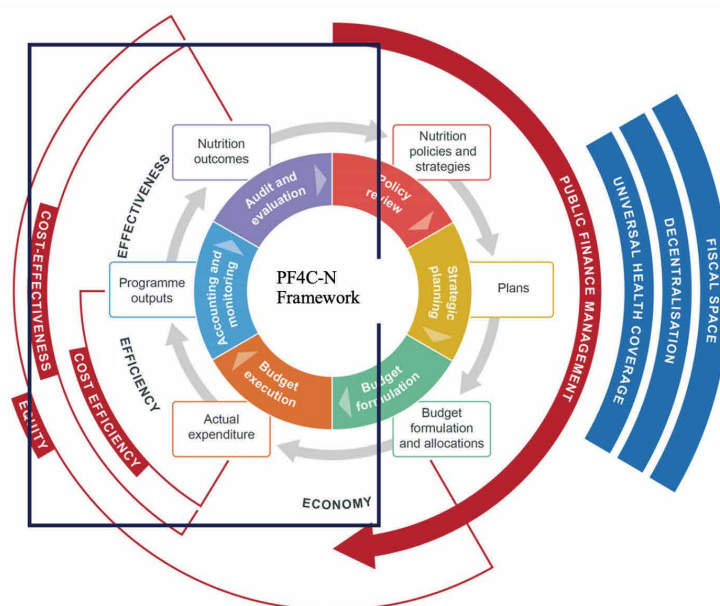
1. VfM and the results chain

The performance of public expenditure can be assessed by the relationship between the resources used and the results that they ‘buy’. Governments need to know, for a given level of budget, how to maximise the results that can be achieved—or, conversely, how to minimise the cost of achieving a given level of results. This is really just a part of results-based management.

In results-based management, the results chain shows how financial resources (expenditures) are

converted into inputs (personnel, goods and services, capital equipment) that are used in the activities needed to produce programme outputs, which in turn generate outcomes and impacts. VfM is the economic assessment of various components and their relationship of the value chain. The VfM concepts in the value chain below are economy, efficiency, effectiveness, cost-efficiency, and cost-effectiveness. Many authors will add ‘equity’ as well, but given its singular importance, this manual devotes an entire chapter to it.

Figure 55: VfM in the PF4C-N framework



To take a simple example from the nutrition sector, public expenditure on nutrition pays for:

- personnel (e.g., salaries of community-based health workers, primary healthcare facility staff and administrative staff);
- goods (e.g., Ready-to-Use-Therapeutic Food, micronutrient supplements, vehicles);
- services (e.g., maintenance of buildings/equipment, utilities such as electricity or water); and
- capital equipment (e.g., new buildings, toilets, computers, printers, copiers).

These expenditures are combined to undertake nutrition programme activities (outreach campaigns, ante-natal clinic micronutrient supplementation, and counselling sessions), producing measurable outputs, such as the number of women receiving 90+ iron and folic acid supplements. Indicators of achievement (such as pregnant woman receiving four or more ante-natal care visits or the proportion of pregnant women who received and consumed 90+ iron and folic acid supplements) measure results at the outcome level. Ultimately, the investments in nutrition have wider social and economic impacts in terms of improved maternal and child health outcomes, employment, human development,

poverty reduction, and economic growth, among others. This is the result at the impact level.

The effectiveness of nutrition interventions has been

studied intensively and is now well documented.

Table 20 shows a table reporting on the principal effects associated with the core package of nutrition interventions this course focuses on.

Table 20: Effectiveness of nutrition interventions

Interventions	Effectiveness
Care of low-birth-weight and very-low-birth-weight infants	Practices such as kangaroo mother care (which includes early, continuous, and prolonged skin-to-skin contact between a mother and the new-born) reduce morbidity and mortality in low-birth-weight infants and increases breastfeeding
Iron-containing micronutrient supplementation during pregnancy	Reduced risk of maternal anaemia and therefore maternal and neonatal mortality and morbidity Reduction in low birthweight (of 10%) and therefore reductions in neonatal mortality and risk of wasting and stunting
Nutritional care of women during pregnancy and post-partum	Reduced incidence of gestational hypertension, pre-eclampsia, and pre-term births, low birthweight of infants (which has an indirect impact on child stunting), and reduced risk of maternal anaemia
Iodine supplementation in childhood and for adult women	Reduced risk of iron deficiency, which affects healthy brain development in the foetus and during childhood
Vitamin A supplementation in childhood	Reduced risk of diarrhoea by 15% and risk of mortality by 28%
Zinc supplementation for treatment of diarrhoea in childhood	Increases height gain and reduces diarrhoeal incidence by 13%
Breastfeeding support and promotion	Relative risk of diarrhoea decreases when being exclusively breastfed. Not being breastfed doubles the risk of diarrhoea among children aged 6–23 months. Early initiation of breastfeeding can reduce risk of neonatal mortality
Appropriate complementary feeding	Reduced the risk of stunting among children
Assessment and management of wasting	Faster rate of weight gain and greater likelihood of recovering from acute malnutrition than those receiving standard care Significant reduction in risk of mortality

Source: Summary of effectiveness from Mavalankar et al. (2016) and Shekar et al. (2017).

Figure 54 provides a linear representation of the results or value chain, again highlighting the relationship between its different components and situating the concepts this chapter will focus on: economy, cost-efficiency, and cost-effectiveness.

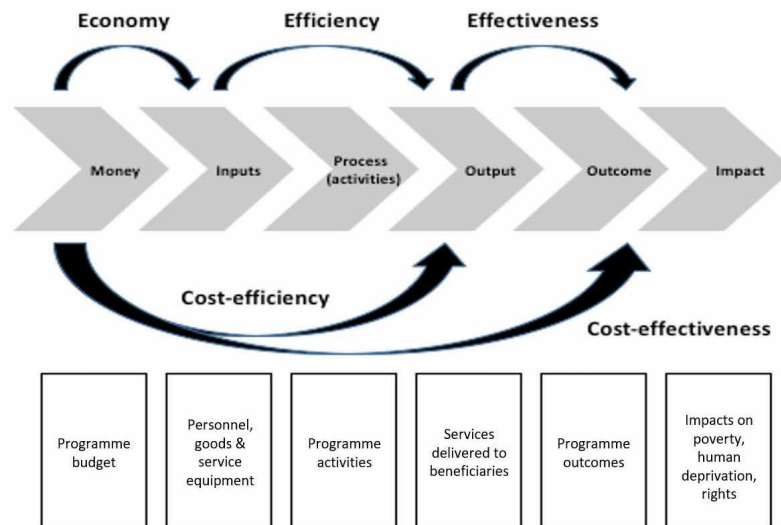
- **Economy** is the relationship between money spent and inputs purchased.
- **Cost-efficiency** is the relationship between money spent and outputs produced.
- **Cost-effectiveness** is the relationship between money spent and higher-level results (outcomes and impacts).

Distinguishing between output and outcome can sometimes be tricky and depends largely on the perspective adopted and hierarchy of the results chain

for the specific intervention. For example, in a severe acute malnutrition (SAM) treatment programme, the number of children discharged as cured may be considered an outcome for some (say, the managers of a programme to treat SAM) but an output for others; at the higher level of the results chain, under-five mortality and contribution to overall disease burden (e.g. in terms of disability-adjusted life year (DALY)) averted may be considered the real outcomes or impacts of a SAM intervention.

How does equity fit into this framework? If we are concerned about the equity of nutrition interventions (results at the output level) and the equity of nutrition outcomes for children, then equity needs to be reflected in the measurement of VfM at both the cost-efficiency and cost-effectiveness levels.

Figure 56: VfM and the results chain



Source: Derived from White et al. (2013)

We will not spend more time on economy, which relates only to the first link in the results chain—whether inputs of appropriate quality are being purchased at the lowest possible price. The degree of economy achieved by a government in purchasing inputs mainly depends on the quality of the public procurement system (for goods, services, and capital equipment), as well as on the mechanisms that determine employment and salary scales in the public sector. Some VfM analyses do not go much beyond ‘economy’, which is often the easiest link in the chain to analyse. Although such analyses are important, they do not tell us about VfM further up the results chain.

We will now learn more about cost-efficiency and cost-effectiveness (Sections 2 and 3), including how they are measured using different tools and approaches. Section 4, on investment cases, introduces cost-benefit analysis (a sophisticated variant of cost-effectiveness analysis) and discusses ‘cost of inaction’ analysis, which uses similar methods to estimate the cost of doing nothing. Examples will show how the methods and tools for analysing VfM are applied in practice, highlighting their respective advantages and limitations.

2. Cost-efficiency analysis

2.1 The concept

Cost-efficiency analysis concerns the relationship between costs and outputs. It therefore cuts across both ‘economy’ (in the purchase of inputs, e.g. in procurement) and ‘efficiency’ (in the conversion of

inputs into outputs, through activities). Cost-efficiency is generally measured by cost-efficiency ratios, which show how much it costs to produce a given output.

2.2 Uses and examples

Here are some examples of the use of cost-efficiency ratios in different sectors.

Table 21: Examples of cost-efficiency ratios in nutrition and health

Nutrition	Health
Cost per SAM treatment Cost of one woman exclusively breastfeeding Cost of one child receiving adequate dosage of Vitamin A supplementation	Cost per patient treated (for example through different delivery modalities such as hospitals, health posts, or community health workers) Cost per vaccination administered Cost per mosquito net distributed

2.3 Key issues regarding the calculation of costs

1. An important issue is what costs to include. Sometimes only the direct programme costs are computed (e.g. Vitamin A capsules). This would exclude overheads, including personnel costs, which are often shared across several programmes (for example when de-worming and Vitamin A campaigns are combined). This may be appropriate if, for example, a new programme makes use of existing staff and systems, but it can be misleading if the purpose is to make comparisons between different programmes or across countries.
2. A related question is whether to use average costs or marginal costs.

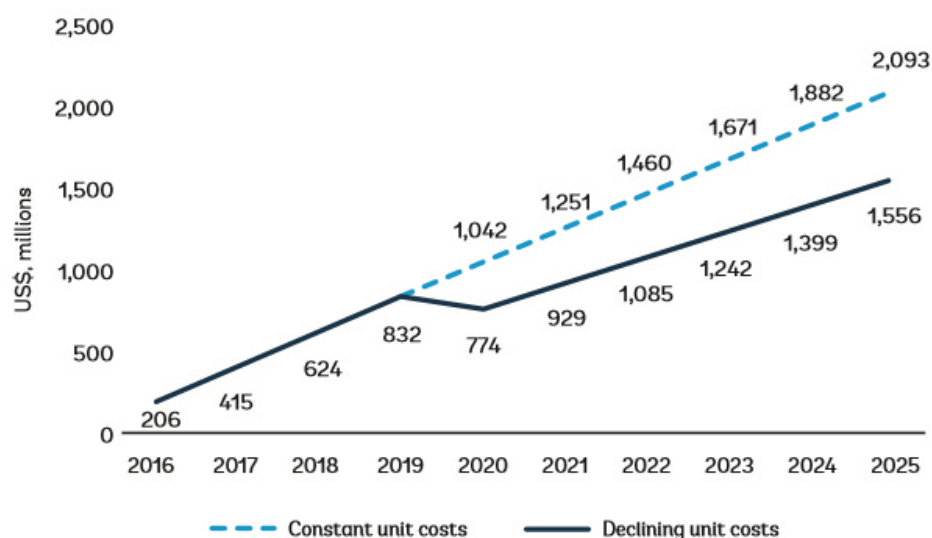
When to use marginal costs: if we want to know whether it is cost-efficient to scale up an existing programme or to add a new intervention to an existing programme, it is the incremental or marginal cost of this

expansion or addition that is important, compared with making some other change or with leaving the programme as it is. An example might be the scale-up of a programme that already has all its core systems in place, making it unnecessary to include those initial investment costs in the calculation of cost-efficiency. The marginal cost of increasing coverage is what counts. Alternatively, suppose a de-worming component or the distribution of mosquito nets is to be added to an existing vaccination campaign: again, it is the marginal cost of adding this component that needs to be calculated.

When to use average costs: if, on the other hand, assessing the overall cost-efficiency of a programme or service (such as Vitamin A supplementation) is in question, average costs (or ‘unit costs’) are needed.

3. A full accounting of costs needs to include the transaction and other costs borne by users (private costs) and not just the costs of delivering a programme or service. Measures of cost-efficiency can depend on the 'viewpoint' of those making the calculations. Governments are often only interested in their own programme costs, but the users of services often also incur costs to access those services. A holistic approach to cost-efficiency takes into account the costs borne by beneficiaries to access a service, such as, for example, travel costs or opportunity costs (in terms of time), which may be substantial. In nutrition, costs borne by families can include transport costs, food supplement costs, income lost, and—in some countries—payments to the health centre for services.
4. Comparisons of cost-efficiency ratios need to be made with care. Besides differences in the nature and quality of programmes, and the types of costs taken into account, there may be large cost differences between urban and rural areas, as well as between small programmes (including pilots) with high initial design and start-up costs and large 'mature' programmes with economies of scale. The costing of the roll-out over time of the needs for treatment for SAM provides a case in point. The cost of delivery of treatment of SAM is expected to reduce by 20% over a 10-year period in Shekhar et al. (2017). This assumption is consistent with the findings from a study in Bangladesh, which examined the difference in cost per case of community nutrition services provided through a vertical programme run by a non-governmental organisation and a government programme run through the health system (Shekar et al., 2017).

Figure 57: Total annual financing needs for the treatment of SAM under constant and declining unit cost assumptions, 2016–25



Source: Reproduced from Shekar *et al.* (2017)

5. Comparisons are also affected by inflation and exchange rates. When using data from different years, costs have to be adjusted for inflation. International comparisons of cost-efficiency ratios (such as the cost per ante-natal visit) will be affected, not only by fluctuations in exchange rates, but also by the type of exchange rate employed: market exchange rates or purchasing power parity exchange rates.

2.4 Benefits and limitations of cost-efficiency analysis

What are the benefits?

1. **Cost-efficiency analysis is useful as a tool for assessing the cost of producing programme outputs.** As long as the outputs are the same, the cost per unit of output can be compared across similar programmes, types of service delivery, or different parts of a country.
2. **Cost-efficiency ratios can help highlight poor performance in programme delivery** and the need for improvements. The analysis can point to the need to introduce reforms or innovations in programme delivery.
3. **It is relatively easy to carry out cost-efficiency analysis,** with some caveats (see below). Usually the cost data and routine administrative data on outputs (needed to calculate cost-efficiency ratios) can be sourced directly from the institutions responsible for managing the programmes being studied.
4. **Cost-efficiency analysis can also be used ex ante to model the effects of operational changes.** Simulations can be run to assess the improvements in cost-efficiency that would result from reforms or innovations in service delivery.

What are the limitations?

1. **It may be difficult to obtain some cost data, for example on overheads** (such as personnel and infrastructure) that are shared by several programmes. Sometimes formulas are used to attribute these costs to individual programmes, but the formulas may be questionable. Similarly, obtaining data on the costs borne by service users and beneficiaries—particularly the informal costs—can be challenging, requiring additional time and resources.
2. **It may be difficult to compare across programmes if the methodologies used for determining costs differ.** Sometimes it is not clear whether the cost-efficiency ratio of a comparator programme has been calculated including or excluding personnel or other overheads, or whether it uses average or marginal costs. In one case it might include the direct and indirect costs of service users or beneficiaries; in another case it might not. International comparisons can be affected by exchange rate movements and the type of exchange rate used.
3. **Good cost-efficiency does not necessarily equate to good VfM.** For example, a food fortification system could reach large number of children and women at low cost, but good cost-efficiency has little value if the quality and efficacy of the nutrients is low. Cost-effectiveness analysis helps us go one step further to draw more far-reaching conclusions about programme VfM, although this too can be affected by Limitations 1 and 2 regarding costs.

Table 22: Cost-efficiency analysis: summary of benefits, limitations, and good practices

Benefits	Limitations	Good practices
<ul style="list-style-type: none"> Assesses how much it costs programmes to produce their outputs Cost-efficiency can be compared across similar programmes, types of service delivery, different parts of a country, etc. Highlights whether service delivery improvements may be needed Relatively easy to carry out as the required cost and output data are usually available Can also be used for ex ante simulations of operational reforms or innovations in service delivery 	<ul style="list-style-type: none"> May be difficult to obtain some cost data, especially on overheads shared by several programmes May be difficult to compare across programmes if costs are calculated with different approaches (average or marginal costs; including or excluding overheads; including or excluding costs borne by beneficiaries) International comparisons may be affected by foreign exchange rates used (market rates or public–private partnership rates) and their fluctuations Good cost-efficiency does not necessarily equate to good VfM if low costs lead to low quality and poor outcomes 	<ul style="list-style-type: none"> Use marginal costs if the purpose is to assess scale-up or an add-on to an existing programme Use average (unit) costs, including all attributed overheads, if the purpose is to assess or compare the overall cost-efficiency of a programme or service To obtain a holistic view of all costs, make sure to include beneficiaries' costs Exercise care when comparing programmes to ensure that cost-efficiency ratios are methodologically comparable Adjust for inflation between different time periods

How do you increase the cost efficiency of malnutrition programs?



of Health Centers: Changeable, to a Point

One way to improve the number of children served is to increase the number of centers operated. However, there are declining marginal returns to more centers: eventually opening new centers will serve existing more patients more conveniently, rather than bringing new children under coverage.



Cost per Health Center: Set by Context

The cost per center includes the costs of paying for doctors, nurses, promoters, and supplies. The cost to the IRC of supporting a center will be different across contexts, but in a single context we are unlikely to be able to reduce the costs of operating already under-resourced centers.

$$\text{Cost per Child Treated} = \frac{\text{Total Cost}}{\text{\# of Outputs}} = \frac{\text{\# of Health Centers} \times \text{Cost per Health Center}}{\text{Population} \times \text{Malnutrition Rate} \times \text{Coverage Rate}}$$



Population: Set by Context

Across contexts, it makes sense to target places that are more densely populated, and therefore allow us to serve more people from a given health center. Within a single context, however, the population density is a major factor that affects cost efficiency but can't be affected by program activities.



Malnutrition Rate: Set by Context

It also makes sense to target places that have higher malnutrition rates, i.e. where the need for malnutrition treatment is greatest. Within a single context, however, the prevalence of malnutrition is a major factor that affects cost efficiency, but can't be affected by program activities.



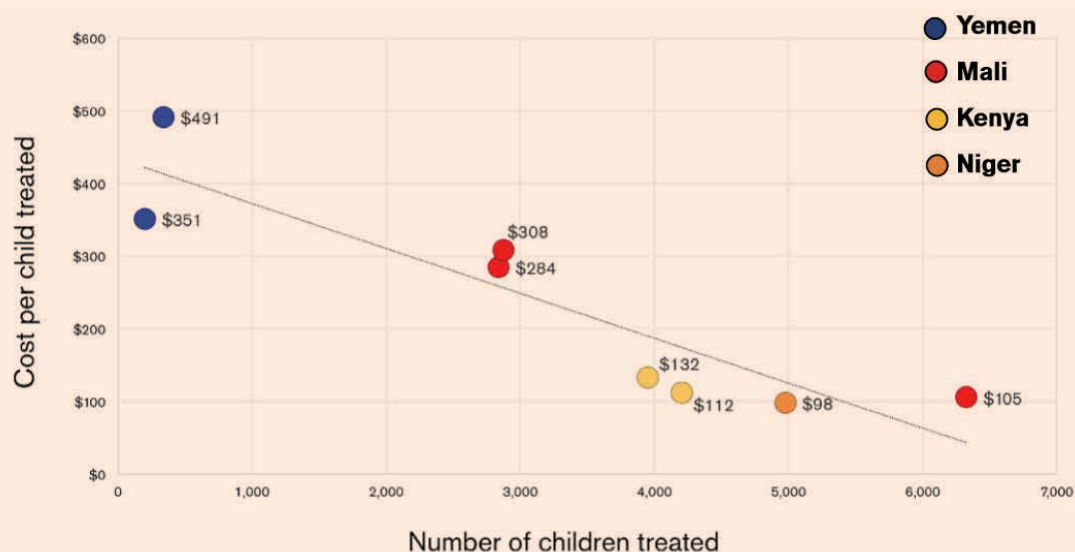
Coverage Rate: Changeable

Within a particular context, the most powerful way to improve cost efficiency is to spread the costs of running health centers over more children by increasing coverage rates. This can be accomplished by opening more health centers, or by improving outreach at existing health centers.

Box 18 Cost-efficiency analysis: treating SAM

The International Rescue Committee (IRC) sought to understand how efficiently it could treat children with SAM in conflict environments and which factors drives the cost-efficiency of out-patient based Community Management of Acute Malnutrition (CMAM) programmes. To do so, IRC analysed eight CMAM programs, looking at how variations in programme features and differences in the contexts in which these programmes were run, impacted cost efficiency.

One of the salient findings was that cost-efficiency is linked to the scale of a programme. Some of the factors underpinning programme scale, however, such as population density and the prevalence of malnutrition, are determined by context, and therefore scale cannot always be obtained. This means that programmes with higher unit costs are not necessarily programmes with a lower cost-efficiency. The relation between cost-efficiency and scale is shown in the graph below.



The figure below summarises some of the other findings and makes a clear distinction between factors that drive cost-efficiency and can be impacted and factors that cannot be impacted. The study found that 'cost per health centre', 'population density', and 'malnutrition rate' are determined by the context in which the IRC operates the programme. The 'number of health centres' determines cost-efficiency and can be determined by the programme to an extent. Finally, the biggest opportunity for the IRC to improve the cost-efficiency of the CMAM programmes is to reduce the costs associated with each health centre to a maximum. That mainly means ensuring that the inputs for the programme (salaries, products, infrastructure, equipment) are purchased at the lowest possible price.

Source: IRC (2016)

3. Cost-effectiveness analysis

3.1 The concept

The purpose of cost-effectiveness analysis is to help make rational choices about programmes by showing how much it costs to achieve policy goals using different programme interventions or modalities. Cost-effectiveness analysis therefore concerns the relationship between costs and outcomes or impacts. In its most simple form, cost-effectiveness can be measured by cost-effectiveness ratios—in other

words, the ratio of the amount of ‘effect’ a program achieves for a given amount of cost incurred, or conversely the amount of cost required to achieve a given effect. A more complex type of cost-effectiveness analysis, typically used in ‘investment cases’, is cost–benefit analysis, which is discussed in Section 4.

3.2 Uses and examples

Nutrition uses cost per life saved and the cost per DALY averted to measure cost-effectiveness of

interventions for nutrition. Box 19 and Box 20 present two examples both from Bangladesh.

Box 19

Cost-effectiveness ratios for community-based and hospital-based management of SAM

Children under five with SAM are at high risk of dying if they do not receive timely and effective therapeutic treatment. In the past, treatment would be provided in a hospital setting, but at high cost (both for the service provider and families) and often with low coverage. This led to the piloting of outpatient/community-based approaches for the management of SAM without complications and in 2007, the UN adopted this approach as the standard of care for non-complicated cases.

In Bangladesh, a randomised control trial conducted in the district of Bhola compared the cost-effectiveness of hospital-based and community-based management of SAM, taking into account not only programme costs but also families’ transaction costs, which were greatly reduced by shifting treatment from hospitals to the communities where they live. Making use of a pre-existing system of community health workers, the cost per DALY averted was US \$26 and the cost per life saved was US \$869. The cost per child cured (US \$180) was 50 times less than the hospital-based model (US \$9,149). Only 5% of the costs in the community-based approach were borne by families, compared with 40% in the hospital-based approach, making treatment far more accessible for the poor and thus also more equitable.

	Hospital-based (US \$)	Community-based (US \$)
Cost per child cured	9,149	180
Cost per death avoided	45,688	869
Cost per DALY averted	1,344	26

Source: Puett et al., 2012.

Box 20**Cost-effectiveness and cost-benefit analyses of 10 nutrition-specific interventions in Bangladesh**

The government of Bangladesh has undertaken the development of a second National Plan of Action for Nutrition. The World Bank estimated the cost of scaling up coverage of nutrition interventions from baseline levels to 90% coverage. Additionally, the study estimated the cost-effectiveness of 13 different nutrition-specific interventions and of the package as a whole. This was done nationally, and by divisions.

Costing

The World Bank study uses two different approaches to estimate the unit cost of the interventions:

1. a programme experience costing approach using budget or expenditure from real-life programmes and obtaining unit costs by dividing total annual expenditure by the number of beneficiaries in a given year. All components of a programme are included in this method; and
2. an ingredients-based costing approach, in which unit costs are estimated based on assumptions regarding the different elements that should make up the specific intervention. The cost is calculated by multiplying unit costs with quantities required. This method is based on an ideal service delivery model and therefore might be less realistic as it misses out on programme inefficiencies and delays. However, this approach can be used for interventions for which budgets are not available or are delivered as part of integrated programmes.

It is important to note that the costs estimated in this study are from the public health sector perspective only and do not include societal costs (e.g. indirect costs such as transport costs for beneficiaries to take up the service). Moreover, the cost estimates do not consider overhead costs, such as capacity development, monitoring and evaluation, and advocacy. The estimated costs are incremental costs of using the existing public health system, i.e. they do not account for existing or new health systems or infrastructure needed to deliver the interventions. The study assumes that the current delivery platform is effective and can reach 90% coverage.

The table below shows the estimated incremental costs and the total costs. The total cost of scaling up the nutrition interventions would be US \$3 billion, of which US \$2.8 billion are the additional costs needed to expand coverage from the baseline to 90%. Private costs make up over 80% of the costs (incremental and total). This is because the cost estimates include fortification of staples such as rice, edible oil, and salt, which are passed on to the consumer. Even though these costs per consumer are small, when aggregated the amount becomes significant.

Cost type	Incremental		Total	
	US\$ (millions)	Share	US\$ (millions)	Share
Public sector costs	384.8	13.5%	536.9	17.9%
Private costs	2,461.2	86.5%	2,470.6	82.1%
Total	2,846.0	100%	3,007.4	100%

Source: Based on Shekar et al. (2017)

Cost-effectiveness

The cost-effectiveness of each intervention and of the total package are shown in the table below. The cost per DALY averted is US \$447, which is much lower than Bangladesh's gross national income (GNI) per capita of US \$1,211. Based on the World Health Organization (WHO)'s standards, the package of interventions is considered to be 'very cost-effective'.⁴⁷ Individually, too, most interventions are considered to be 'very cost-effective'. Promotion of complementary feeding (2.8 times higher than GNI/capita) and public provision of complementary food (1.2 times the GNI/capita) are exceptions but are still considered cost-effective.

Figure 58: Incremental costs, deaths, cases of stunting, and DALYs averted, and cost per death, cases of stunting, and DALY averted

Intervention	Total cost	Deaths averted (in 0–59 mo)	Cases of stunting averted	DALYs averted	Cost per death averted	Cost per case of stunting averted	Cost per DALY averted
Iron and folic acid supplementation during pregnancy	\$21,063,918	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Breastfeeding counseling	\$30,066,623	8,951	29,727	152,484	\$3,359	\$1,011	\$197
Complementary feeding education	\$27,242,400	511	127,153	8,845	\$53,282	\$214	\$3,080
<i>Infant and young child feeding package jointly</i>	\$57,309,022	9,462	156,880	161,330	\$6,057	\$365	\$355
Vitamin A supplementation for children	\$11,000,859	707	259	16,229	\$15,560	\$42,462	\$678
Deworming of children	\$12,984,402	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Therapeutic zinc and oral rehydration solution for the treatment of diarrhea	\$23,339,193	3,560	n.a.	81,617	\$6,556	n.a.	\$286
Treatment of severe acute malnutrition	\$26,077,073	10,622	n.a.	186,757	\$2,455	n.a.	\$140
Public provision of complementary food	\$105,740,020	4,150	381,040	71,792	\$25,481	\$278	\$1,473
Rice fortification (public costs)	\$74,391,248	12,183	n.a.	188,218	\$6,106	n.a.	\$395
Salt iodization	\$9,119,778	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Calcium supplementation during pregnancy	\$16,043,639	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Management of moderate acute malnutrition	\$25,749,155	9,105	n.a.	155,071	\$2,828	n.a.	\$166
Edible oil fortification	\$1,966,264	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total	\$384,784,572	49,789	502,957	861,014	\$7,728	\$765	\$447

Note: n.a. = not applicable.

Source: Reproduced from Shekar et al. (2017)

47 WHO classifies interventions as 'very cost effective' if cost per DALY averted is less than gross domestic product (GDP)/capita; they are 'cost-effective' if cost/DALY averted is 1–3 times GDP/capita; and they are 'not cost-effective' if cost/DALY averted is more than three times GDP/capita.

3.3 Benefits and limitations of cost-effectiveness analysis

What are the benefits?

1. **Cost-effectiveness analysis using simple cost-effectiveness ratios can be a powerful tool for making public policy choices.** By providing evidence on the costs required to achieve a policy goal through different types of programmes, cost-effectiveness ratios enable policymakers to identify the programme(s) that have the greatest impact for a given level of expenditure, or that can achieve a given impact for the least expenditure.
2. **Cost-effectiveness analysis can be applied both to existing programmes (ex post) and to future programme options (ex ante).**⁴⁸ *Ex post* cost-effectiveness analysis typically uses actual cost data and outcome/impact data drawn from impact evaluations or household surveys to show the cost-effectiveness of programmes. *Ex ante* analysis requires simulations, using survey data and assumptions about the design of different programme options to predict the expected cost-effectiveness of programmes.
3. **Cost-effectiveness analysis is feasible if programme cost data are available, along with data on outcomes/impacts from impact evaluations or household surveys.** The cost data requirements are the same as in cost-efficiency analysis. On the outcome/impact side, cost-effectiveness analysis requires data on the outcomes and impacts attributable to a programme, compared with a counterfactual. The counterfactual might be the situation in the absence of the programme, or some other scenario (for example an alternative programme option). The data required can be obtained from scientific impact evaluations, such as randomised control trials (if available). An alternative is to carry out a regression analysis using data from representative household surveys (again if available) to estimate the higher-level outcomes or impacts resulting from programme coverage.

What are the limitations?

1. **The same caveats about the cost data used in cost-efficiency analysis apply to cost-effectiveness analysis.** Programmes can only be compared using cost-effectiveness ratios if the costing approaches are the same (e.g. using average or marginal costs, including or excluding overheads, and including or excluding the costs borne by users as well as service providers).
2. **For cost-effectiveness ratios to be comparable across programmes or different types of interventions, they must have shared outcome or impact goals that can be expressed by the same indicator.** Cost-effectiveness ratios cannot be used to compare the VfM of programmes that aim to produce different types of outcomes or impacts as there will then be no common metrics. To compare the cost-effectiveness of nutrition programmes, outcomes are often specified in terms of DALYs averted or life-years saved.
3. **The required outcome or impact data may not be available or are difficult to compute.** Unlike programme output data, data on outcomes and impacts usually cannot be obtained from routine administrative data sources. Many programmes do not have robust data on attributable outcomes and impacts from randomised control trials or other rigorous impact evaluations; and regressions from data in household surveys are only possible when these surveys collect data on the programmes or services being studied.

⁴⁸ The terms 'ex ante' and 'ex post' are derived from Latin and refer respectively to 'what may lie ahead' and 'what lies behind'. *Ex ante* analysis is an analysis of anticipated changes or effects. It includes forecasts and simulations based on models. By contrast, *ex post* analysis is an analysis of what has happened in the past.

4. **It may take a long time for the impacts of a programme to materialise**, making it difficult and costly to obtain the required data. Sometimes assumptions have to be made using data from other countries that may have quite different contexts, and this can undermine the credibility of the analysis. For example, it is technically challenging to estimate what later-in-life returns from labour market participation are from decreased mortality through promotion of breastfeeding.
5. **Much cost-effectiveness analysis is also static**, in the sense that there is no attempt to capture the indirect or secondary effects of programmes—to take just one example, the long-term impacts of a nutrition programme (via improvements in cognitive development, on school performance, and later in adult life) on productivity, incomes, and poverty reduction.
6. **Some types of impacts of a political economy or institutional nature may not be quantifiable at all**, making it impossible to calculate cost-effectiveness ratios. Examples include programmes aimed at conflict prevention, the strengthening of governance, and capacity development, but this does not mean that programmes with these kinds of objectives are not cost-effective or ‘good VfM’. They require a different, more qualitative type of analysis.

Table 23: Cost-effectiveness analysis: summary of benefits, limitations, and good practices

Benefits	Limitations	Good practices
<ul style="list-style-type: none"> • Goes beyond outputs to focus on outcomes and impacts • A powerful tool for making public policy choices • Can be applied both to existing programmes (<i>ex post</i>) and to future programme options (<i>ex ante</i>) • A pragmatic option, with simpler data requirements and less investment of research resources than cost–benefit analysis 	<ul style="list-style-type: none"> • The same caveats about the cost data used in cost-efficiency analysis apply also to cost-effectiveness analysis • Cost-effectiveness ratios cannot be used to compare across programmes with different types of outcomes or impacts (they have to share the same denominator) • It may take a long time for the impacts of a programme to materialise, making it difficult and costly to obtain the required data • Much cost-effectiveness analysis is static and does not capture the indirect or secondary effects of programmes • Some types of impacts may not be quantifiable at all, making it impossible to calculate cost-effectiveness ratios 	<ul style="list-style-type: none"> • Opt for cost-effectiveness analysis, using cost-effectiveness ratios, as a way to measure the relationship between costs and outcomes/impact when: (i) outcomes or impacts can be measured by the same indicator; (ii) data are available; or (iii) data or resources are not available for more far-reaching cost–benefit analysis • Exercise care when making comparisons across programmes to ensure that the costing used is methodologically comparable • Use qualitative research methods to assess the cost-effectiveness of programmes with goals that are of a more qualitative nature, such as capacity building, institutional development, or conflict prevention

4. Cost–benefit analysis and investment cases

Cost–benefit analysis seeks to overcome the limitations of simple cost-effectiveness ratios. This differs from the simpler kind of cost-effectiveness analysis discussed above in two main ways:

- it seeks to capture, as far as possible, all the long-term indirect and secondary benefits of investing in a programme; and
- to establish the common metrics needed to do

this, it monetises the different kinds of benefits obtained.

For instance, a cost–benefit analysis will monetise the value of both the immediate health benefits and the longer-term economic and social benefits associated with better health, such as increased productivity in the economy and the lighter burden on the public healthcare system.

4.1 The concept

Like the simpler cost-effectiveness analysis discussed in Section 3, cost–benefit analysis aims to help policymakers make sound decisions about the investment of their limited budget by measuring the costs and effects of a programme or intervention. However, cost–benefit analysis seeks to overcome the limitations of simple cost-effectiveness ratios by valuing all the benefits and costs (including indirect or secondary benefits) in both the short and the long term. This makes it possible to indicate whether the aggregate benefits of the programme or intervention outweigh its aggregate costs.

Since the benefits may be multiple and varying in character (for example, a nutrition programme may affect short- and long-term health, school performance, adult productivity, and GDP growth), the benefits have to be monetised so that they can be aggregated and compared with costs.

In cost–benefit analysis, benefits and costs are projected into the future, often far into the future. Benefits and costs are then discounted, using a long-term interest rate, to obtain their present value (PV). Three common alternative benefit–cost measures can then be used.

- **Net PV (NPV)** = PV of benefits minus PV of costs. If $NPV > 0$, benefits outweigh costs. If, for example, the total discounted benefits of a nutrition programme are US \$200 million and its total discounted costs are US \$50 million, then its NPV is positive at US \$150 million.
- **Benefit–cost ratio (BCR)** = PV of benefits divided by PV of costs. If $BCR > 1$, benefits outweigh costs. As can be seen, this is just a reformulation of the previous measure. In the example given, the nutrition programme has a BCR of 4.0. It is probably a good investment, unless of course there is an alternative programme with an even higher BCR, say 5.0. As a ratio, the BCR is particularly useful for comparing between programmes. The higher the BCR, the better the investment.
- **Internal rate of return (IRR)** = discount rate at which NPV is equal to zero. The higher the IRR, the higher the return on the outlay of expenditure and therefore the better the investment.

4.2 Uses and examples

Cost–benefit analysis has been used to make the case for scaling up investments in all social sectors, including in nutrition. Box 21 shows how cost–benefit

analysis has been used to make the investment case for a range of interventions to reduce stunting and micronutrient deficiencies.

Box 21**Applying cost–benefit analysis to nutritional interventions**

The World Bank’s report on *Scaling Up Nutrition: What Will it Cost?* estimated the cost and benefits of implementing a series of nutrition interventions. The study consolidated the available information from scientific studies, providing BCRs, including those in the table below. Some of the findings are striking. For example, micronutrient powders and salt iodisation have benefits that are more than 30 times greater than their costs.

BCRs for selected nutrition interventions

	BCR
Micronutrient powders	37:1 (iron)
De-worming	6:1
Iron fortification of staple foods	8:1
Salt iodisation	30:1

Source: Horton et al. (2010)

Cost–benefit analysis has also been used to make an investment case for the full package of nutrition interventions mostly delivered by the health system. The World Bank’s Investment Framework for nutrition calculated the cost–benefit ratios for investing in the full package to meet the World Health Assembly targets. Assuming universal coverage (with scale-up at constant rate for the first five years and 90% coverage for the next five), they estimated the long-term benefits of reductions in stunting via effects on cognitive development, school performance, and adult productivity. They found very high returns on investing in nutrition interventions (most delivered by the health sector): 15.1 in South Asia, 15.8 in East Asia and Pacific, and 4.2 in sub-Saharan Africa.

4.3 Benefits and limitations of cost–benefit analysis

What are the benefits?

- 1. Cost–benefit analysis is a much more complete and dynamic tool for analysing VfM** at the higher results level of outcomes and impacts, compared with simple cost–effectiveness ratios. Cost–benefit analysis makes it possible to compute the multiple effects of a programme, or to compare programmes with different types of effects and to take into account their long-term indirect effects as well as long-term costs (such as the maintenance costs resulting from infrastructure investments).

- 2. When carried out well and with good data, cost–benefit analysis can make a powerful investment case to inform decisions on the use of public resources.** In the context of COVID-19, investment cases can be made to support budget allocations towards new, or existing, nutrition programmes. They can be used to show how financing for nutrition can be an important investment in human capital, provide evidence of the long-term benefits they bring to society and the economy.

What are the limitations?

1. **It is very difficult to put a monetary value on some types of benefits, such as the reduction of mortality.** What is the value of a life saved, or, for that matter, of a DALY averted? When there is interest in the equity or distributive implications of a programme, the value of its benefits will depend on the welfare weights given to different categories of beneficiaries. For example, is adding one life year to a group whose life expectancy is lower worth the same as adding one life year to a group of people whose life expectancy is higher?
2. **As in the case of cost-effectiveness analysis more generally, cost-benefit analysis is even more problematic regarding benefits that are not only impossible to monetise, but impossible even to quantify.** This is particularly true for programmes or projects that aim to improve governance or develop capacity, or to contribute to goals such as social cohesion or peace.
3. **Cost-benefit analysis often faces formidable data constraints, especially on the benefit side.** Apart from including a programme's short-term direct effects, (the type used in simple cost-effectiveness ratios), it is necessary to also include projections of the indirect and long-term effects (which often get realised far into the future). This type of information is normally only available from longitudinal studies that follow cohorts of beneficiaries over many years. For example, the cost-benefit analysis conducted on nutrition impacts (cited in Box 4) drew heavily on data from a 35-year study in Guatemala that followed a panel of individuals from early childhood to adulthood to measure the effects of stunting on school performance and, in early/mid-adulthood, on employment and consumption per capita. In most developing countries, however, and on most subjects for which cost-benefit analysis might in theory be useful, there are no studies of this kind.
4. **Due to the last problem, cost-benefit analysis is often heavily dependent on assumptions,** the validity of which may be questionable; or, alternatively, it avoids making such assumptions by deliberately being only partial in scope. Assumptions may have to be made about the monetary value of certain kinds of benefits that are impossible to quantify or, even if quantifiable, impossible to monetise—or these benefits have to be left out of the quantitative analysis and taken into account by a separate qualitative analysis. Because there are often no national data on the long-term indirect effects of programmes, coefficients have to be 'borrowed' from studies in other countries where the context may be radically different. In addition, results can be sensitive to the discount rates used to calculate PV. This is usually the social opportunity cost of capital (SOC), which represents the return that would be obtained by not making the investment. Governments and international financial institutions apply different SOCs in cost-benefit analyses, producing different results (see Zhuang et al., 2007). In general, it is important to carry out a sensitivity analysis to find out whether changes in key assumptions alter the cost-benefit analysis conclusions.

In many cases, these shortcomings of cost-benefit analysis mean that the use of more simple cost-effectiveness ratios may be more appropriate, especially if the purpose of the analysis is to compare programme alternatives that have the same outcome objective. Cost-effectiveness ratios are simpler to calculate, less dependent on assumptions, and therefore also more transparent.
5. **BCRs by themselves do not say anything about the magnitude of the costs and benefits:** e.g. a project with benefits of US \$3,000 and cost of US \$1,000 has the same BCR as a project which has a benefit of US \$3 at a cost of US \$1.

Table 24: Cost–benefit analysis: summary of benefits, limitations, and good practices

Benefits	Limitations	Good practices
<ul style="list-style-type: none"> • More complete and dynamic tool for analysing VfM at the higher results level of outcomes and impacts compared with simple cost-effectiveness ratios • When carried out well, with good data, cost–benefit analysis can make a powerful investment case 	<ul style="list-style-type: none"> • As in cost-effectiveness analysis more generally, cost–benefit analysis is difficult to apply to programmes with benefits that are impossible even to quantify • Even if benefits are quantifiable, it is not always possible to put a monetary value on benefits, for example the reduction of mortality or a DALY averted. Redistribution effects require welfare weights, which are subjective • Cost–benefit analysis often faces formidable data constraints, especially regarding long-term indirect and secondary benefits, and is often heavily dependent on assumptions, including on the discount rate to apply 	<ul style="list-style-type: none"> • Care should be taken to carry out cost–benefit analysis only when adequate data is available to do it properly • Always undertake a sensitivity analysis to find out whether changes in key assumptions alter the conclusions • Complement cost–benefit analysis with analysis of affordability and feasibility (a good investment is not always financially affordable or administratively feasible)

Box 22 gives a brief overview of what is meant by an investment case. Investment cases, when used to aid decision making, usually involve cost–benefit analysis to see if the benefits justify the cost of an

intervention. However, investment cases can vary in their purpose and thus in the information and analysis they include.

Box 22 What do we mean by an investment case?

Investment cases are often developed in context where funding for nutrition is inadequate and where nutrition stakeholders are of the view that, when policymakers will have better information on the relative returns on investment in nutrition interventions, they will allocate additional funding to nutrition programmes.

In reality, investment cases can be quite varied. For example, an investment case can be an advocacy document for making the case for investment in a sector/programme/issue; or it can be a decision making aid, setting out the various options and coming to the optimal one. It can be about the nutrition sector as a whole or about a specific nutrition intervention; it can be made at global, regional, national, or even sub-national level.

An investment case usually includes the following:

- making the case for nutrition: what are the benefits? (for example, these might include the human rights case, social returns, and economic returns);
- setting out the need: what is the gap/challenge? (for example, nutrition services not available or not accessible to the population); and
- financing: what is the current spending on the sector (and how does this break down)? How much is needed to meet the standards? What is the financing gap? Is this gap affordable—what is the fiscal space and what are the financing options?

The precise economic analysis used in an investment case will vary and may be a cost–benefit analysis, or return on investment, or cost-effectiveness analysis if various options are being considered.

Box 23**An investment case for a World Bank-funded nutrition programme in Cambodia**

Investment cases are also formulated to provide economic and financial justification for investment in a programme. World Bank programmes, in particular those funded by the Global Financing Facility, often require an investment case before the programme is approved. In 2019, the World Bank provided financing for the Cambodia Nutrition Programme targeted at seven provinces of Cambodia with the objective of improving utilisation and quality of maternal and child health and nutrition services. The programme covers the scale-up of 11 priority interventions through supply-side interventions (such as increase in the provision of ante-natal care services), demand-side interventions (such as social behaviour change and communication programmes), and interventions to improve the quality of care at health facilities.

A cost-effectiveness analysis was carried out for the programme.

- A costing exercise was carried out to estimate the cost over the five years of the programme. The PV of the total programme was calculated to be US \$46.3 million. The Lives Saved Tool was used to calculate the health impact of the programme. Estimates show that the programme can avert 13,183 child deaths and 298 maternal deaths. Since the lives saved would result in future gains from labour force participation, the economic benefits of the programme were estimated to be US \$528.3 million.
- The Incremental Cost-Effectiveness Ratio (ICER) for the project is US \$3,434 per life saved. Given Cambodia's GDP/capita of US \$1,267, the programme is considered to be 'cost-effective' using WHO's cost-effectiveness threshold for health and nutrition programmes (ICER is between 1 to 3 times the GDP/capita).
- The BCR is 11.4, which means that for every US \$1 invested the returns will be between US \$11 and US \$12.

Benefits and costs	Estimated value
Total costs (US \$ million), PV	1.062
Total lives saved	13,481 (13,183 child, 298 maternal)
Total benefits (US \$ million)	12.80
ICER (US \$)	3,434 per life saved
BCR	11.4

Source: World Bank (2019)

Box 24 Investment case for nutrition in the Philippines

The investment case calculates the cost of scaling up a package of 15 nutrition-specific interventions to a 100% coverage. The package in interventions includes the 10 Lancet 2013 series (Bhutta et al., 2013) interventions and the anti-malarial treatment of pregnant women, de-worming, food fortification (salt and flour), and the use of mass media for nutrition-related behaviour change communication.

The cost of each intervention and different packages is calculated. This includes the costs of inputs to the programme (e.g. drugs) and the value of health facility staff's time and effort to deliver services. The study also calculates the cost of added workload to the health staff, the cost of incentives to motivate health workers, and the cost of materials to support the workers to do their job (e.g. growth monitoring kits).

The total cost is calculated over a 10-year period, with a gradual scale-up of intervention in the first three years and then maintaining universal coverage for the remainder. The total cost is estimated to be US \$1.062 billion.

Benefits are calculated by pathway as the reduction in loss from undernutrition, as shown in the table below.

Pathway	Annual benefits/ reduction in economic loss
Loss of future workforce due to child mortality	US \$312 million
Decrease in adult productivity due to deficits in child growth and cognition	US \$1.059 billion
Low productivity among current workforce due to anaemia	US \$73 million
Value of excess and preventable healthcare utilisation due to child morbidity	US \$117 million
Total	US \$1.561 billion

The investment case then compares the costs of the package of interventions with the benefits, as shown in the table below. The BCR is estimated to be 12:1, showing that for every US \$1 investment in the nutrition package there is a return of US \$12. Given these costs include private costs (e.g. the costs borne by the private sector, or consumers of fortified foods), the investment case additionally calculates the BCR for the public sector investment. This estimated figure is even higher: for every US \$1 of public finance investment in the package there is a return of US \$19.

Benefits and costs	Estimated value
Total benefits (US \$ million)	12.80
Total costs (US \$ million) (including private/societal cost)	1.062
Total BCR	12:1
Total public cost (US \$ million)	680
Public finance BCR	19:1

The cost–benefit analysis and the cost of inaction study were utilised together by nutrition stakeholders in the Philippines to make the case to the government for increasing its financing for nutrition programmes. A launch of the report was held at the Philippines Congress with attendance from high-level officials and legislators from the government. The studies were released at a time when the Congress was working on the 1,000 days Bill, which was eventually passed in 2018. Findings from the analyses were used by the Government of the Philippines to form the basis for the National Nutrition Council’s budget allocation to the package of interventions between 2017 and 2022.

Source: UNICEF (2018), Bhutta *et al.* (2013)

5. The cost of inaction in nutrition

5.1 The concept

A cost of inaction analysis is not really a VfM exercise at all, but is included here as it shares some characteristics with cost–benefit analysis. VfM is about assessing the value of expending public resources on a service or programme. By contrast, an analysis of the cost of inaction simply computes the losses resulting from doing nothing, or nothing more than what is already being done. It does not assess the VfM of any specific action and so does not contribute to decision making about what to do. Its use is to draw attention to the losses that result from continuing with business as usual. As such, it largely performs an advocacy function.

As mentioned, however, cost of inaction analysis does share some characteristics with cost–benefit analysis. The costs of inaction may be of multiple types and stretch far into the future. As in cost–benefit analysis, these costs have to be expressed in money terms, projected long-term, and then discounted to obtain their total PV.

However, a cost of inaction analysis is simpler than a cost–benefit analysis, since it only computes the losses that result from doing nothing or from not doing more than is already being done. In nutrition, these costs might be losses such as worse health, lower educational achievement, lost productivity, or reduced GDP. Because no specific course of action is being assessed, however, there are no programme costs or benefits to compute.

5.2 Uses and examples

The World Bank has estimated that many countries lose at least 2%–3% of their GDP to undernutrition (Horton et al., 2010). This is a cost of inaction estimate in the sense that it tells of the economic loss that countries suffer as a result of not doing more than they are doing now.

In the ‘Business case for nutrition investment in the Philippines’, the cost of doing nothing was estimated across four different pathways:

1. the NPV of the foregone future workforce lost due to child mortality attributable to undernutrition;
2. the NPV of depressed adult productivity due to deficits in child growth and cognition, measured across several indicators of undernutrition, including childhood stunting, anaemia, and iodine deficiency disorders;

3. the current value of depressed productivity among anaemic adults working in agriculture, industry, and other employment manual labour; and
4. the current value of excess and preventable healthcare utilisation due to zinc deficiencies, suboptimal breastfeeding, and low birthweight.

Adding the cost of doing across these pathways, the analysis finds that the undernutrition *status quo* is estimated at around US \$4.5 billion per year (equivalent to around 1.5% of 2015 GDP).

Similar analyses have been carried out for other Asian countries such as Cambodia, Pakistan, and Timor-Leste.

Box 25 gives an example of the cost of inaction of early childhood development published in *The Lancet*.

Box 25 The cost of inaction in early childhood development

In 2016 The Lancet published a series focusing on early childhood development. One of the headline messages was that the cost of inaction in early child development is high. The series estimated that 43% of children under the age of five—an estimated 250 million—living in low- and middle-income countries are at risk of suboptimal development due to poverty and stunting. A poor start in life can lead to poor health, poor nutrition, and inadequate learning, resulting in low-earning adults and social tensions. These 43% of children are expected to earn on average 26% less in annual income on an individual level. At a societal level, the cost of inaction for not improving stunting to a prevalence of 15% or less and not addressing developmental delays through preschools and home visits is several times more than what some countries currently expend on health or education respectively.

The methodology for estimating the cost of inaction involved the following steps: (1) estimating the prevalence of stunting, poverty, or both; (2) estimating the loss of schooling (and school performance) due to those levels of stunting, poverty, or both; and (3) estimating the income loss due to the deficit of schooling years. Step 1 used stunting and poverty rates per country from WHO and the World Bank. Steps 2 and 3 used longitudinal studies from various countries and had to apply the findings from these as assumptions to the global population of stunted and/or poor children. For societal costs of inaction, the net benefits foregone by not intervening to improve early healthy development were estimated, based on a BCR.

Sources: Richter et al. (2017); Lu (2017): full series at www.thelancet.com/series/ECD2016

5.3 Benefits and limitations of cost of inaction analysis

What are the benefits?

1. **Cost of inaction analysis can draw attention to the harmful economic effects of deprivations or rights violations** being allowed to remain as they are. Often policymakers have very little if any awareness of these costs and this kind of computation can have a considerable 'wake-up' value.
2. **By focusing on quantifiable economic costs, cost of inaction estimates add an economic dimension to the rights-based arguments for action.**

What are the limitations?

1. **Cost of inaction studies do not indicate what might best be done about a problem.** Unlike cost–benefit analysis, which shows the return to a specific course of action, cost of inaction analysis does not go beyond quantifying the economic losses resulting from doing nothing. As noted above, this has the benefit of being a wake-up call about a problem but it does not help decide *what* to do about it.
2. **Cost of inaction analysis has other limitations in common with cost–benefit analysis:** the difficulty or subjectivity involved in putting a monetary value on some types of effects (mortality, DALYs, etc.) and formidable data constraints, requiring heavy dependence on assumptions.

Table 25: Cost of inaction analysis: summary of benefits, limitations, and good practices

Benefits	Limitations	Good practices
<ul style="list-style-type: none"> • Can draw attention to the harmful economic effects of deprivations or rights violations being allowed to remain as they are • Adds an economic dimension to the rights-based arguments for action 	<ul style="list-style-type: none"> • Does not indicate what would be the best course of action to address a problem • Has other limitations in common with cost–benefit analysis: the difficulty or subjectivity involved in putting a monetary value on some types of effects and formidable data constraints that lead to heavy dependence on assumptions 	<ul style="list-style-type: none"> • Use cost of inaction analysis as a 'wake-up call' when there is very little awareness of the costs arising from allowing a problem to persist • As with cost–benefit analysis, care should be taken to carry out this type of analysis only when adequate data is available to do it properly • Always undertake a sensitivity analysis to find out whether changes in key assumptions alter the conclusions

Box 26 The cost of not breastfeeding

Breastfeeding reduces the risk of childhood infections and premature death among children and minimises harm to cognitive development in early childhood. For mothers, breastfeeding reduces the risk of post-partum haemorrhage and morbidity later in life. The World Health Assembly has a target to increase global prevalence of exclusive breastfeeding from 37% in 2012 to 50% in 2025.

The *Cost of Not Breastfeeding Tool* is an Excel-based tool developed to allow health and nutrition stakeholders to use publicly available national data to estimate the human consequences (in terms of morbidity and mortality) and the economic costs of not breastfeeding. The tool takes into consideration three categories of cost: (1) costs in terms of women and child illness and death; (2) costs to households and to the health system of treating illnesses attributed to not breastfeeding; and (3) future economic costs due to loss of potential income resulting from premature death and cognitive losses. The costs estimated by this tool are likely to be conservative as they do not take into account societal costs in terms of caregivers' time (often women) spent on taking care of children who are ill.

Analysis carried out using the *Cost of Not Breastfeeding Tool* shows that about 0.6 million childhood deaths per year and 0.97 million cases of childhood obesity can be attributed to not breastfeeding according to WHO recommendations.

In terms of costs, the total global economic losses of not breastfeeding according to global WHO standards has been estimated to be US \$341.3 billion (0.7% of global GNI) annually. This comprises cost of health treatment of avoidable morbidity (US \$1.1 billion), economic losses mortality in terms of future loss earnings each year (US \$53.7 billion), and cognitive losses (US \$258.4 billion). The estimated total costs of not breastfeeding are US \$86 billion in East Asia and the Pacific and US \$22 billion in South Asia.

Country	Total child deaths	Total maternal deaths	Total annual cost (US \$ billion)	Total cost as % of GNI
Bangladesh	5,948	610	1.4	0.72%
Cambodia	1,097	255	0.13	0.83%
India	99,552	11,404	14.5	0.69%
Indonesia	15,028	5,170	9.4	1.05%
Laos PDR	1,597	117	0.2	1.96%
Myanmar	4,229	1,028	0.4	0.69%
Philippines	8,924	1,913	3.8	1.05%
Pakistan	44,302	3,278	5.8	2.14%

Source: Alive and Thrive (2020) assumes GDP growth at 3% per year

6. Concluding remarks

VfM analysis helps policymakers make sound choices about what programmes and expenditures to prioritise. The importance of VfM analysis has been emphasised by the COVID-19 pandemic, as difficult decisions will have to be made on how to allocate increasingly scarce resources. However, VfM is not the only aspect to take into account when making resource allocations. Relevance (to development goals), administrative feasibility, social and political acceptability, and affordability (fiscal space) are other critical considerations in any policy choice. Alongside these other dimensions, however, VfM does help policymakers understand how resources can best be used to achieve policy goals.

There is no single right methodology for conducting VfM. Each approach has its advantages and disadvantages.

- **Cost-efficiency analysis** is important because it can help uncover and address administrative inefficiencies or high transaction costs for programme beneficiaries. By focusing on the relationship between costs and outputs, however, cost-efficiency only goes part of the way in assessing VfM. Better cost-efficiency does not necessarily mean better cost-effectiveness if it reflects worse service quality, prejudicing outcomes and impacts.
- **Cost-effectiveness analysis** gets to the heart of VfM by focusing on the cost of achieving policy goals, at the outcome or impact level, across programmes. When these can be expressed in terms of the same outcomes (such as DALYs averted, improvements in learning outcomes, or reduction in the poverty gap), simple cost-effectiveness ratios are likely to be the most appropriate measures of VfM in practical terms.
- **Cost-benefit analysis** involves a more ambitious attempt to assess the return on an investment (or an outlay of public expenditure on a public programme). This can provide a powerful 'investment case'. However, cost-benefit analysis is complex to carry out, requires considerable investment in time and expense, and may be very difficult in practice due to data constraints and the inherent difficulty of quantifying or monetising some kinds of benefits, leading to heavy dependence on assumptions that may be of dubious validity. If this is the case, it may be possible to conduct a partial cost-benefit analysis including only some elements and to complement this with more simple cost-effectiveness ratios and/or qualitative analysis.
- **Cost of inaction analysis** highlights the losses resulting from not doing anything about a problem and so primarily has a 'wake-up' function. While helping to alert policymakers to the consequences of a problem, it does not help identify the best course of action to address it, unlike cost-benefit analysis or simple cost-effectiveness ratios. It also shares some of the methodological and data difficulties of cost-benefit analysis. The 'Cost of Not Breastfeeding' tool is an application of a cost of inaction analysis in nutrition. This is discussed in more detail in Box 25.

In practice, the appropriate approach to adopt will depend on the purpose of the analysis (broad advocacy, selecting between programme options, improving operational performance, etc.) and thus the kind of questions being asked, as well as practical considerations such as data availability and the amount of time and resources available for analysis.

A close-up photograph of a young child with dark hair and eyes, smiling while eating. The child's face is decorated with thick, yellow ochre paint in circular patterns on the forehead, cheeks, and nose. The child is holding a metal spoon with a small piece of food on it, and a metal bowl filled with food is visible in the foreground. The background is blurred, showing a blue wall and a purple strap.

MODULE

9

Equity



Overview of the module

A. Why is this module important?

Policies regarding the raising and spending of public resources have major equity implications for families and children. Almost all aspects of public financial management (PFM) affect the distribution of resources and access to services, so it is not surprising that equity issues have emerged in modules throughout this course. In this module, equity is the central focus.

This module focuses on how to analyse equity within public expenditure analysis, which reaches across the results chain in Module 1.

B. Why does this matter for nutrition stakeholders?

Equity is a central focus of the global development agenda. It is embedded in the Sustainable Development Goals (SDG) framework, along with its pledge to leave no one behind, and is a cornerstone of health and social policies in Asian countries. The COVID-19 pandemic, however, has broadly exacerbated inequities across the globe.

The continued focus of national governments and the international community on equity recognises the inequitable social and economic conditions in which many children and families live; it also reflects the collective attempt to address multidimensional and monetary child poverty in comprehensive national plans, as well as the equitable allocation of resources to implement them.

C. Learning objectives

By the end of this module, you will:

- understand the key concepts and tools used to analyse equity in public finances, including benefit incidence analysis (BIA) in particular;
- be able to determine whether public expenditure on a service, transfer, or subsidy is progressive or regressive, in absolute or relative terms; and
- understand how different financing approaches in the social sectors affect the costs borne by households and thus access by the poor to basic services.

D. What does this module cover?

Specifically, we will look at:

- the relationship between equity in public finances and income distribution;
- the use of 'incidence analysis' to measure how the tax burden and the benefits of public expenditure are distributed across different population groups, such as income quintiles, or those living in urban and rural areas; and
- the role of public financing in ensuring equitable access to social services and issues concerning user fees in health and education.

E. Reading Materials

Core readings

- Davoodi, H.R., Tiongson, E.R., and Asawanuchit, S.S. (2003) 'How useful are benefit incidence analyses of public education and health spending?', IMF Working Paper 03/227, available at: www.imf.org/external/pubs/ft/wp/2003/wp03227.pdf.
- Read **pp. 3–16**. This IMF paper provides a short overview of the use of BIA, one of the main topics in this module, to analyse equity in public spending in the health sector.
- In addition to the above reading, these two videos give step-by-step guides to measuring inequality:
 - Measuring Inequality Part 1—Lorenz curves, available at: <https://vimeo.com/281812333>.
 - Measuring Inequality Part 2—Gini coefficients, available at: <https://vimeo.com/281814634>.

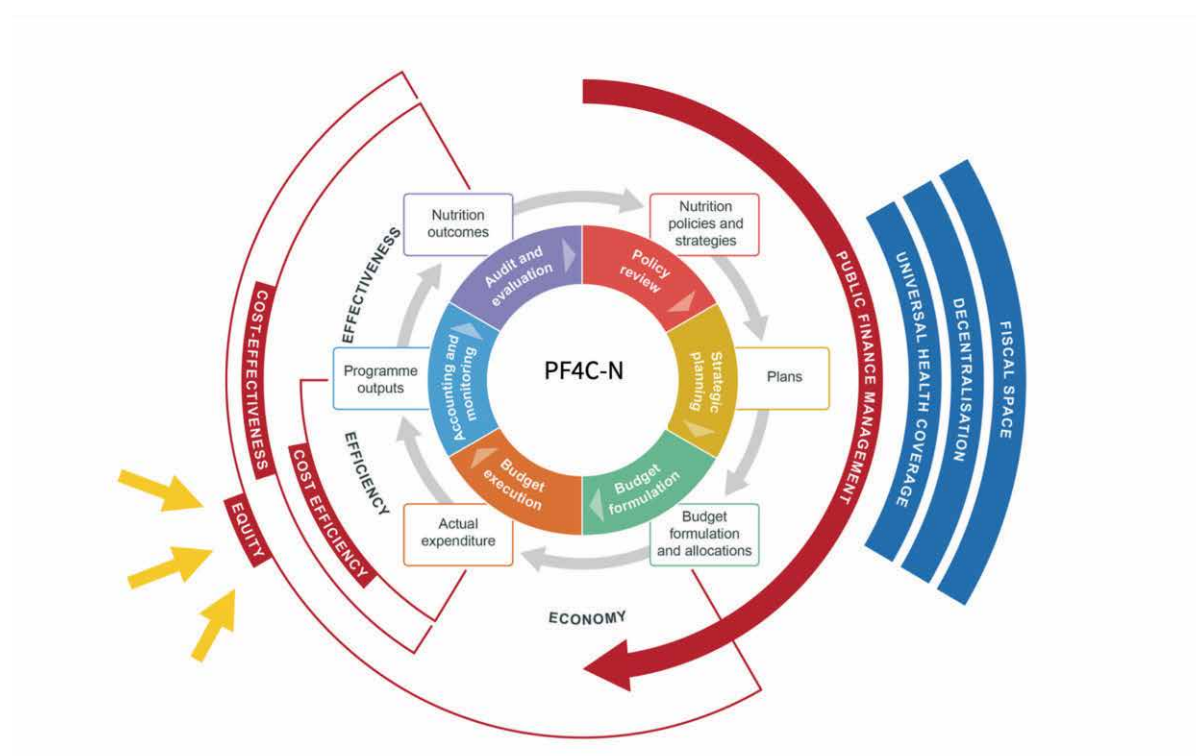
Suggestions for further reading are given at the end of the module.

1. Equity in the PFM results chain

All components of the PFM results chain touch upon equity. The policy review will indicate the extent to which equity has been a consideration of the evaluation of the previous policy cycle, and the equity-related objectives will be specified in the strategic plan and the corresponding budget allocations. When it comes to the budget implementation part of the results chain, we can

assess the distribution of actual expenditure across different population groups; the latter parts of the budget cycle, especially 'audit and evaluation', allows the opportunity to do some more in-depth analyses to examine the extent to which policies, plans, and budget execution actually have the desired effects in terms of nutrition outputs and outcomes in the targeted population groups.

Figure 59: Equity in the PF4C-N framework



In most (if not all) low- and middle-income countries, nutrition outcomes, alongside health and education outcomes, tend to follow a prescribed pattern: poorer and rural households have worse outcomes than richer households. As these differences are found to be unacceptable, we speak of an inequitable distribution of nutrition outcomes.

Inequity in nutrition outcomes is in part a direct result of a combination of the following two elements, which have been described in more detail in previous sessions:

- nutrition interventions are not available to the population, or they are only available to some parts of the population, for example those living in urban centres; or
- nutrition interventions are not accessible to the population, or they are only accessible to some segments of the population, for example richer households.

Reducing inequality is part of the SDG Framework. As part of adopting the 2030 Agenda, countries signed up to 'leave no one behind' and to 'endeavour to

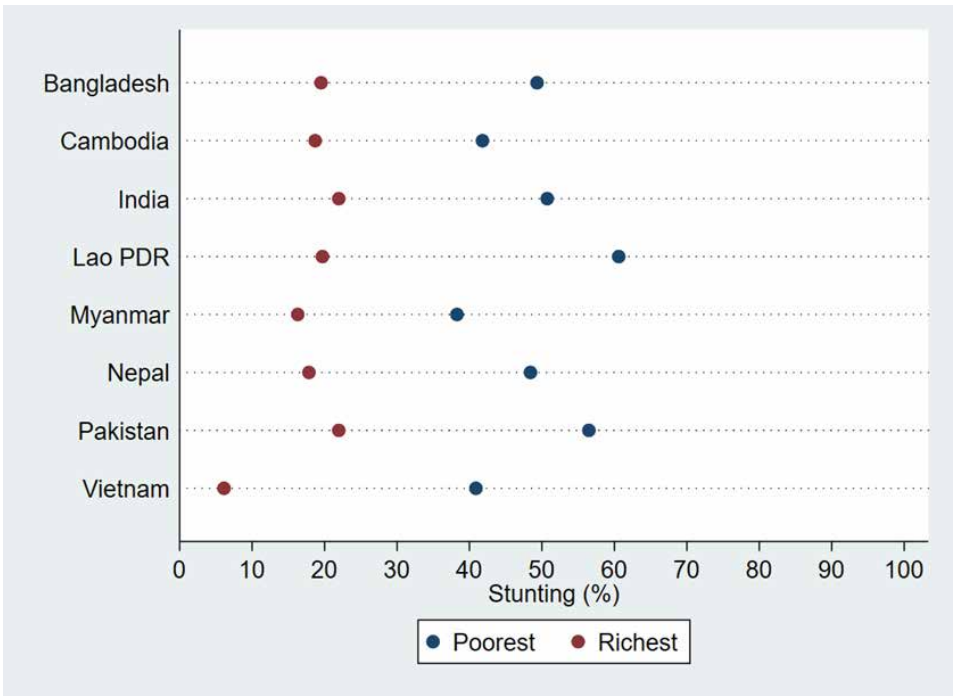
reach the furthest behind first'. The 2030 Agenda recognises that high and rising inequalities are not only an impediment to growth and human development; they are also a violation of shared norms, values, and people's intrinsic sense of fairness. Moreover, there is a specific goal related to equity—SDG 10 'Reduce inequality within and among countries', including Target 10.2 'By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status'. Below are some illustrations.

Rumsby and Richards (2016) find that, in nearly all the countries for which they had ethnicity and

nutrition data, children in different ethnic groups have varying levels of malnutrition. On average, children in disadvantaged ethnic groups had 2.8 times the rate of stunting and six times the rate of wasting as children in the groups that were better off.

In South Asia, improvements in stunting prevalence have been unequal across wealth quintiles. In particular, in Pakistan and India, the poorest quintile has experienced only single-digit changes in stunting prevalence over time. In contrast, stunting prevalence in the wealthiest quintiles has declined by more than a third in both countries, giving rise to increasing inequalities (Krishna, 2018).

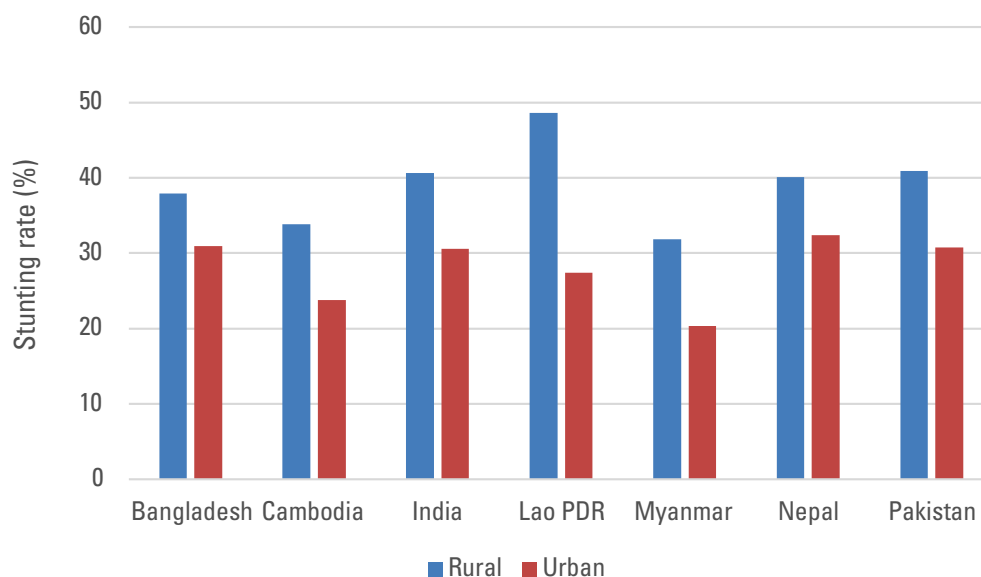
Figure 60: Stunting in the poorest and richest households in Asia (last available year)



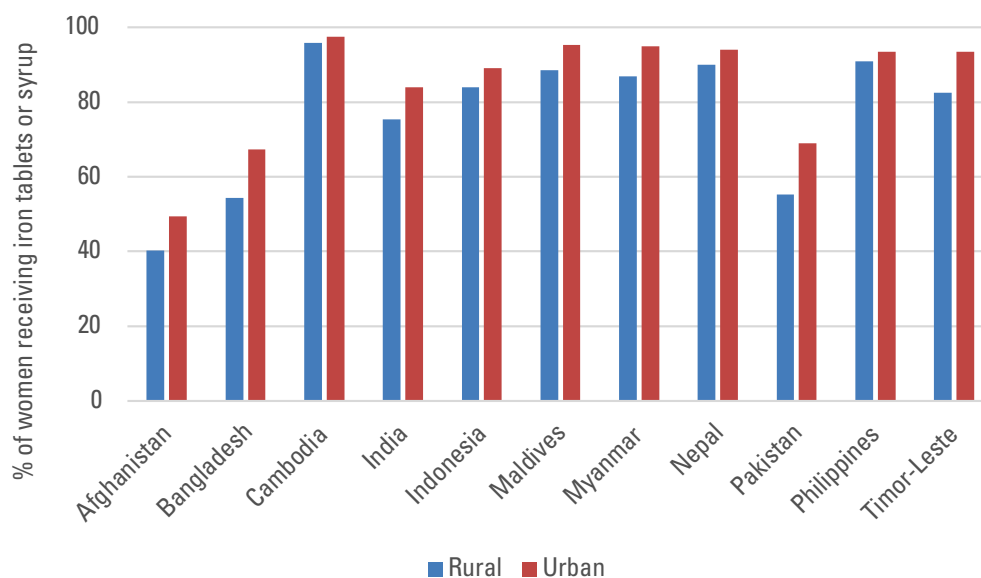
Source: World Bank Health, Nutrition and Population Database (data accessed 09 January 2020)

Stunting is consistently lower in richer households in every single Asian country in the sample (Figure 60). Similarly, stunting is consistently higher in rural areas in every country (Figure 61) and women living in rural

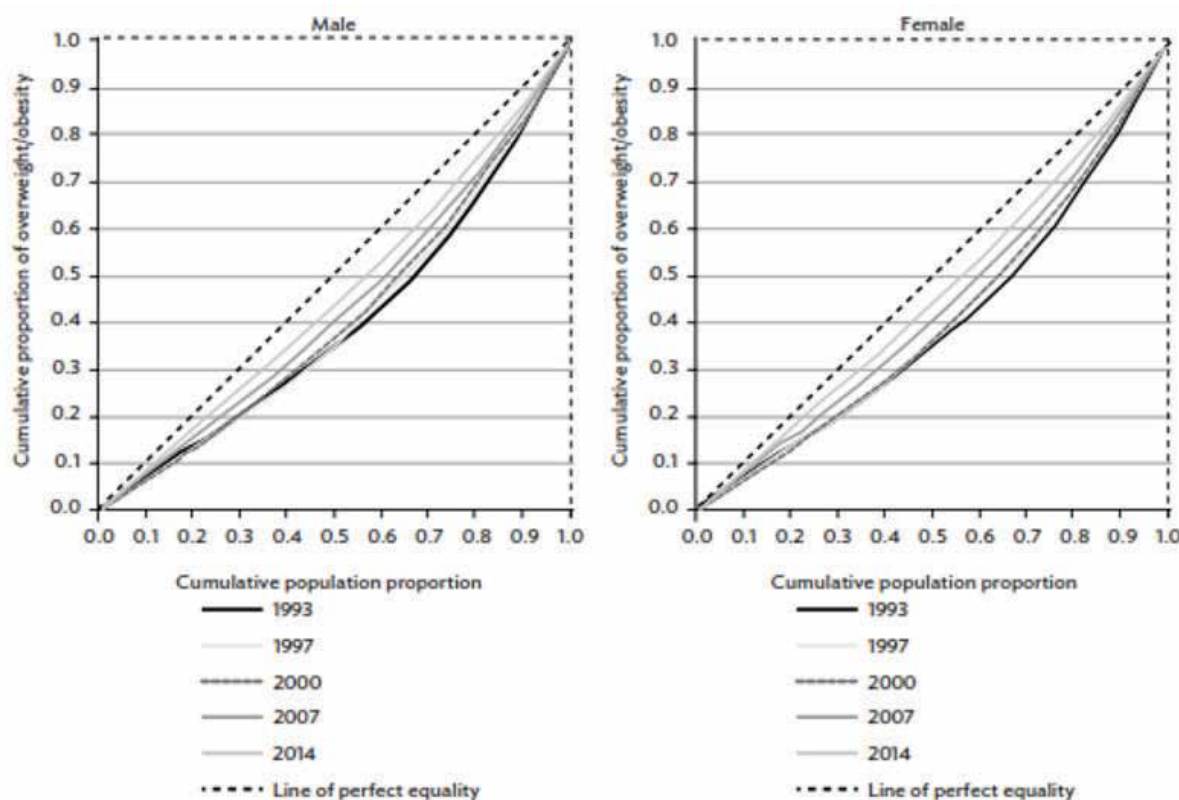
areas consistently receive less iron folic acid supplements than those living in urban centres (Figure 62).

Figure 61: Prevalence of stunting is much worse in rural areas compared to urban areas

Source: World Bank Health, Nutrition and Population Database (data accessed 09 January 2020)

Figure 62: Percentage of women receiving iron tablets or syrup, by location of residence

Source: DHS Stat Compiler (data accessed 09 January 2020)

Figure 63: Concentration curves of overweight and obesity in Indonesia

Source: Aizawa, T. and Helble, M. (2018)

Figure 63 shows that the distribution of overweight and obesity has become less inequitable (less concentrated in the poor) for both males and females in Indonesia between 1993 and 2014.

In the context of COVID-19, improving equity has become increasingly important, as the pandemic has broadly exacerbated pre-existing inequities. A recent study on the effects of historic pandemics (2003-2016) found that income inequality in affected countries increased steadily over the following five years.⁴⁹ This relationship was even stronger and more pronounced when the pandemic instigated an economic contraction, as is the case with COVID-19. Early evidence already indicates that COVID-19 is disproportionately affecting the poorest and leading to an increase in inequality.⁵⁰ Evidence from these

historic events also suggests that when disadvantaged groups experience shocks, they adopt coping strategies, such as reducing good consumption, which can be highly detrimental to nutritional outcomes.⁵¹

While similar patterns in nutrition outputs and outcomes are persistently observed across Asia, explaining these inequities is not straightforward: their causal pathways are complex, touching on income inequality, gender inequality, geographical inequality, disability, and gender. Harris and Nisbett (2018) propose initiative to reduce inequities in five discrete areas: access to public services, disadvantaged groups, social protection, redistribution, and challenging embedded imbalances of power.

49 D. Furceri et al. (2020). 'COVID-19 will raise inequality if past pandemics are a guide', VoxEu & CEPR, published 8 May. Available at <<https://voxeu.org/article/covid-19-will-raise-inequality-if-past-pandemics-are-guide>>.

50 D. Popova et al. (2021). *Strengthening the evidence on the correlation between fiscal equity and social outcomes for children*, (New York: UNICEF), <<https://www.unicef.org/media/104506/file/Fiscal%20Equity%20and%20Social%20Outcomes%20for%20Children.pdf>>.

51 R. Hill and A. Narayan (2021). 'What COVID-19 can mean for long-term inequality in developing countries', *World Bank Blogs*, published 7 January. Available at <<https://blogs.worldbank.org/voices/what-covid-19-can-mean-long-term-inequality-developing-countries>>.

- **Fair access to universal public services** does not only include nutrition services delivered through the health sector; it also includes services such as immunisation and clean drinking water, which relate to the underlying determinants of nutrition. Where possible, services should be provided free or charge. If this is not possible, arrangements should be made to ensure that specific groups are not excluded from access.
- **Targeted action for disadvantaged groups:** government spending should favour disadvantaged groups (socio-culturally and nutritionally) or regions. Women and young children are often the most disadvantaged groups when it comes to nutrition and the most likely to benefit from nutrition services.
- **Social protection:** while more relevant to nutrition-sensitive interventions, social protection can provide a nutritional safety net, either in the form of cash or through the direct provision of food. To increase access to nutrition services delivered through the health sector, social protection may be conditional on compliance with uptake of nutrition services such as growth monitoring or attending Infant and Young Child Feeding (IYCF) counselling

sessions.

- **Redistribution:** progressive taxation can be used if additional fiscal resources generated are used to fund interventions that support equity. For example, taxes on unhealthy foods can be considered an equity intervention if the funds collected are reinvested in making other foods more affordable.
- **Challenging embedded imbalances of power:** power dynamics can result in or maintain inequity. While tackling power imbalances takes time, improving accountability mechanisms and reforming democratic institutions and civil society can address these imbalances of power. The direct applications for nutrition could, for example, include increasing the participation of those affected by nutrition policies in the nutrition policy and programme process.

This Public Finance for Children - Nutrition (PF4C-N) chapter focuses on PFM issues in malnutrition. In the following sections we define inequity in nutrition and propose ways to measure it, followed by recommendations to improve inequity through PFM interventions.

2. Basic equity concepts in public finance

It is useful to begin by clarifying what ‘equity’ means, and how it is related to—and different from—the concept of ‘equality’. While equality relates to things being the same, equity denotes *fairness*, or the achievement of equality of opportunity and outcomes, including by compensating for disadvantages.

The pursuit of equity means tackling differences in wellbeing that are seen to be unfair or unjust. It is important to emphasise that different societies will have a different view of what constitutes fairness. However, international agreements and conventions have established a legally-enshrined consensus on the rights that apply to everyone everywhere.

Governments who are signatory to the Convention of the Rights of the Child (CRC) have an obligation to ensure the equitable realisation of the rights set out in the CRC through tackling the main causes of these inequalities. In nutrition, for example, biological factors may put some people at greater disadvantage or risk than others; but differences in nutrition outcomes are not just the result of biological differences. They are also due to differences in people’s wealth and income levels, the environmental conditions in which they live, and their physical access to nutrition services. Other factors such as gender discrimination, for example, may also lead to unjust inequalities in access to nutrition services.

Many underlying and immediate causes for inequitable distribution of nutrition outcomes are linked to inequities in fiscal policies that affect the availability and quality of nutrition services. Improving the equity of public expenditure can often bring fairer results than simply ensuring increased allocations for nutrition programmes.

There may be a trade-off between equity and efficiency, although this depends on whether equity is incorporated into the goals against which efficiency is being measured. Efficiency is a process concept, whereas equity is a strategic objective, to which efficiency can be subordinated.

Equity can be measured at different levels: financing of nutrition services; access to or utilisation of nutrition services; or higher-level nutrition outcomes,

such as stunting, obesity, or child mortality. In practice, equity analysis in the nutrition sector focuses mainly on nutrition outcomes, but it is important not to lose sight of nutrition service financing and access to and utilisation of nutrition interventions.

At the service and financing levels, equity is often described in two different ways.

- **Horizontal equity** is said to occur when people receive equal access to nutrition services for the same needs—for example, when all mothers have access to ante-natal visits of the same quality or when children suffering from acute malnutrition receive the same treatment. In most countries, the main focus of attention is on ensuring horizontal equity in access to nutrition services (of equivalent quality), irrespective of the ability to pay (income), residence (by geographical regions or between urban and rural areas), or gender.
- **Vertical equity** is said to exist when the burden of making services available is fairly shared. The principle behind vertical equity is that those with higher incomes should make larger contributions relative to those who have lower incomes. This is particularly relevant to issues concerning taxation and other forms of revenue collection to finance health and nutrition services, but also to the levels of public subsidy, the charging of fees, and insurance mechanisms associated with accessing nutrition services.

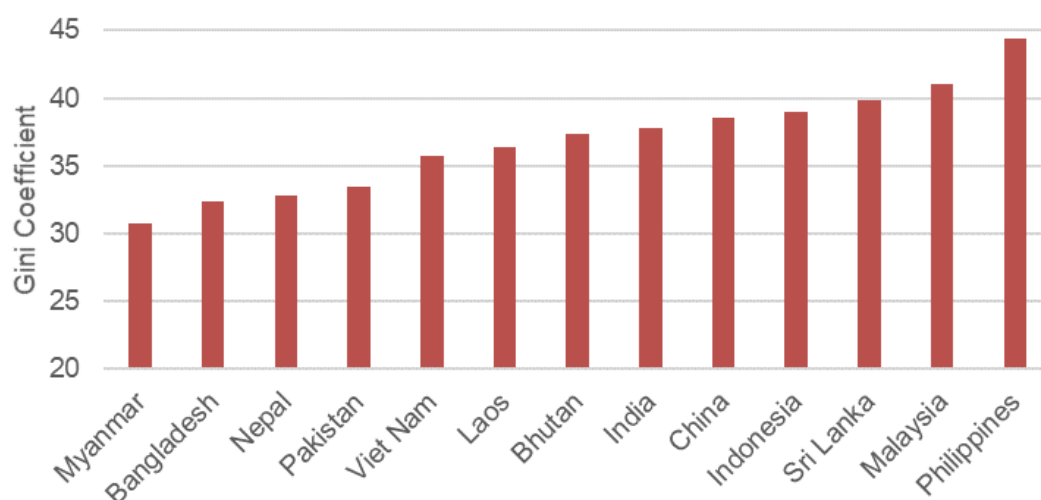
Respecting public finances, however, equity issues go beyond those concerning the financing and utilisation of nutrition services. Budget policies also affect equity through expenditure on subsidies and social transfers (which often have an explicit redistributive function) and, on the revenue side, through taxation (which may be progressive or regressive).

The **Gini coefficient** (or Gini index) is the most common measure of the distribution of income in a society, with a value ranging from 0 (expressing perfect equality, where everyone has the same

income) to 1 (expressing maximum inequality, where a single person has all the income). Figure 64 shows data on the Gini coefficient for a selection of countries in Asia. There is a wide range of values

from 0.32 in the Republic of Korea (low income inequality) to 0.44 in Philippines (higher income inequality). Box 27 presents a critique of the Gini coefficient.

Figure 64: Gini coefficient in selected Asian countries



Source: World Bank, World Development Indicators (accessed 01 May 2020); last available year

Box 27 Piketty's critique of the Gini coefficient

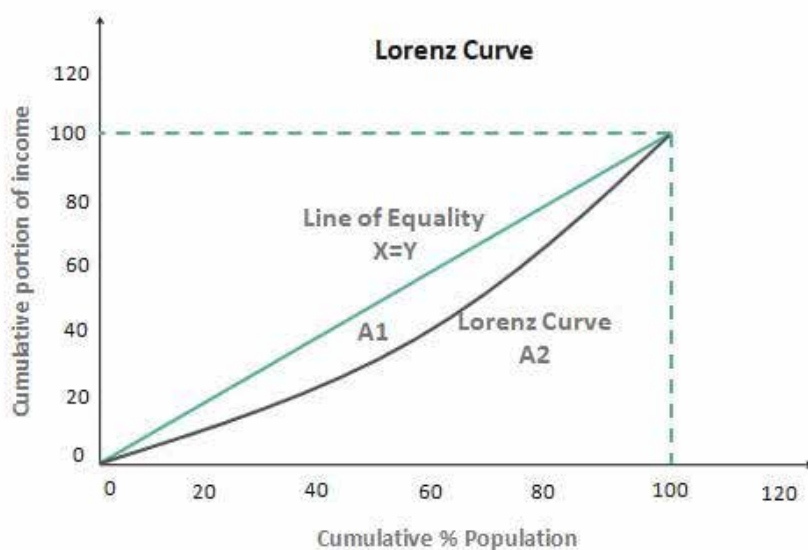
In his book *Capital in the Twenty-First Century* (2013), the economist Thomas Piketty identifies a number of limitations of the Gini coefficient and other indices (such as the Theil index) as comprehensive measures of inequality. Piketty asserts these measures claim to express in a single number all that income or wealth distribution can tell us about inequality, when in fact the distribution of incomes, expenditures, or wealth cannot be summarised so succinctly. For instance, the difference between the bottom and the middle of the hierarchy, the middle and the top, or the top and the very top, may all be individually relevant and subject to different processes and dynamics, and will very likely need to be assessed individually to be properly understood.

Piketty advises similar caution when using indices such as inter-decile ratios, for example the P90/P10 ratio, which describes the ratio between the 90th percentile in the distribution and the 10th percentile, which is often used by national statistical agencies and Organisation for Economic Cooperation and Development (OECD) reports on inequality.

Income inequality can also be represented graphically by the **Lorenz curve**, as shown in Figure 65. Going from left to right, this shows the cumulative distribution of income from the poorest to the richest. In a situation of perfect equality (a Gini value of 0), each additional percentile of the population would add exactly 1% of the total national income, resulting

in a straight 45° line, as shown in the figure. In any society with some income inequality, the Lorenz curve must lie below the 45° line (or 'line of equality'). The further the Lorenz curve is from the 45° line, the greater the inequality. The Gini coefficient measures the area between the 45° line and the Lorenz curve.

Figure 65: Lorenz curve and the 45° line



Box 28

Videos explaining the Lorenz curve and the Gini coefficient

Measuring inequality part 1—Lorenz curves: this video shows how income inequality in a population can be measured and presented graphically using a Lorenz curve. It explains how the Lorenz curve is derived, using a step-by-step hypothetical example. Available at: <https://vimeo.com/281812333>.

Measuring inequality part 2—Gini coefficients: this video explains how the Gini coefficient is calculated from the Lorenz curve. It explains how the Gini coefficient can be used to understand the level of inequality in a country. Available at: <https://vimeo.com/281814634>.

Because of the differential effects of taxation and public expenditure on the income distribution, the value of the Gini coefficient and the position and shape of the Lorenz curve will vary after income has been adjusted for different types of taxation, fees, social transfers, and subsidies, including for social services such as education and health. The extent to which the income distribution will alter as a result of

these additions and deductions of resources depends on two factors:

- the total amount of the revenue from a tax or the spending on a service, transfer, or subsidy; and
- the distribution (incidence) of the burden of the tax or the benefits of the expenditure.

3. Benefit analysis in public finance

3.1 The concept

BIA measures the distribution across the population of the benefit of a public service, subsidy, or social transfer. This depends both on the distribution of expenditure across different types of services (including within sectors), subsidies, or transfers and on the distribution of beneficiaries. BIA is mainly

applied to measure the equity of public expenditure across income or expenditure quintiles (or deciles), but it can also be used to measure distribution against other dimensions, such as gender, geographical areas, and ethnic groups.

3.2 How to measure benefit incidence

BIA can be applied to specific services, transfers, or subsidies, or to a whole sector. In the latter case, it is still necessary to identify its different components. In health, for example, these might be primary, secondary, and tertiary healthcare; Or disaggregated into national hospitals, district hospitals and local health centres, or by different types of health programmes.

The benefit incidence of expenditure on these different services (or transfers or subsidies) can be calculated as follows.

1. **Rank the population into sub-groups:** these are usually quintiles or deciles of the income or consumption expenditure distribution, although it is also possible to carry out BIA for other sub-groups, such as males and females (e.g. for education expenditure BIA) or those living in different geographical areas, such as urban and rural areas. The data is sourced from national household surveys. Some BIA is carried out using households rather than individuals as the unit of beneficiary, but it is generally considered preferable to use individuals. This can affect the results of BIA, for example when poorer households have more members than richer households.
2. **Estimate the utilisation or coverage of each service (or transfer or subsidy) by each population sub-group:** this data also usually comes from household surveys.
3. **Calculate the unit cost of each service (or transfer or subsidy) to be analysed:** as this is

BIA of public expenditure, the unit costs should be net of any cost recovery fees, out-of-pocket expenses by users of the service, or user fees. The public cost data should be comprehensive, including those borne by all levels of government, and should preferably include both recurrent and capital expenditure. The latter should be amortised to take into account the fact that benefits are spread over several years.

4. **Calculate the public expenditure on each service (or transfer or subsidy)** by multiplying the unit cost by the number of beneficiaries in each population sub-group: this shows how the benefit of the expenditure is distributed across the different sub-groups of the population.
5. **Aggregate the expenditure on each service (or transfer or subsidy) for each population sub-group** to calculate the benefit incidence of public expenditure in the sector as a whole.

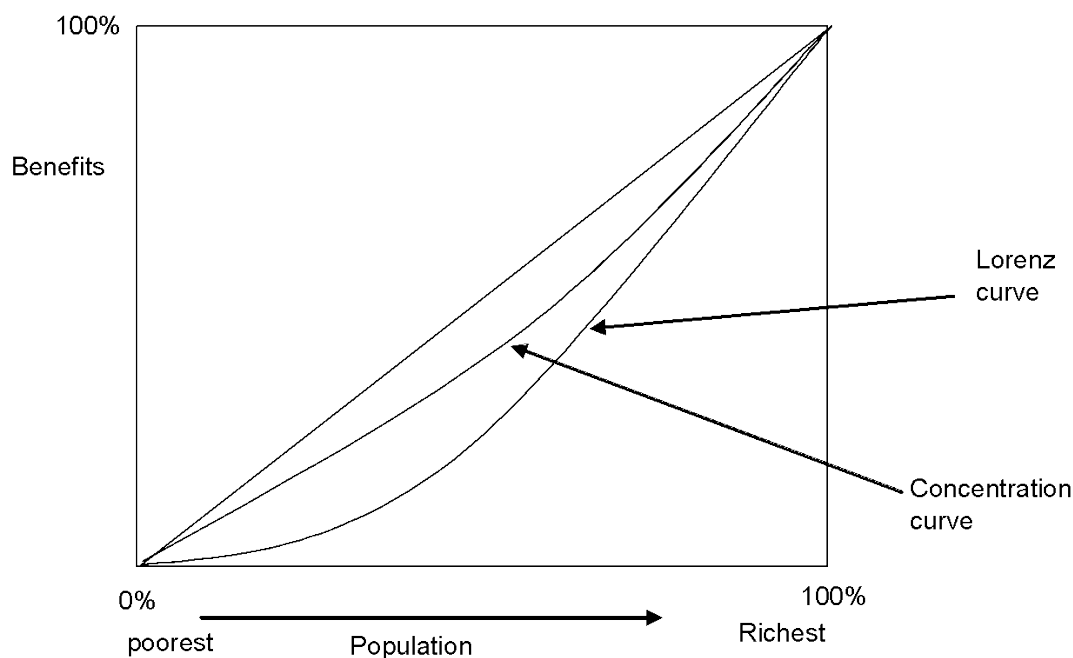
For each service (or transfer or subsidy), or for the sector as a whole, there can be a **benefit incidence ratio**, which expresses the share of the expenditure (benefit) obtained by each population sub-group divided by the share of that sub-group in the total population. For example, in BIA using population quintiles, this ratio expresses the share of a benefit obtained by each quintile (x%) divided by the share of the quintile in the total population (20%). It is then easy to see whether the poorer quintiles are receiving an equal, smaller, or larger proportion of the benefit of a service, transfer, or subsidy.

When the population sub-groups are defined in terms of income or expenditure per capita, benefit incidence can also be expressed by a concentration coefficient (or index) and can be shown graphically by a concentration curve. This displays the cumulative incidence of benefits across the population, ranked, as for the Lorenz curve, from poorest to richest (before taxes, transfers, and subsidies). See Figure 66 for an example from a hypothetical country.

Is the benefit incidence of expenditure, shown in Figure 66, progressive or regressive?

The fact that the concentration curve lies below the 45o line, like the Lorenz curve, suggests that expenditure on this service is regressive. But the fact that the concentration curve lies closer to the 45o line than the Lorenz curve indicates that expenditure on this service is less regressive than the income distribution. This is described as being *relatively progressive*, as it means that it makes final income less regressive than it otherwise would be.

Figure 66: Benefit incidence of public expenditure on a service, across the income distribution, as shown by a concentration curve



3.3 Examples and results of tax and BIA in the health sector

Analysing the benefit incidence of public spending in health shows that it depends on a number of factors including the level of income and type of health expenditure. In a review of 10 countries (India, Sierra Leone, Kyrgyzstan, Nepal, Indonesia, Burkina Faso, Moldova, Ethiopia, Ghana, and Brazil), Witter *et al.* (2018) find that spending on health was always progressive in relative terms (relative to the Gini coefficient) and, in the case of Brazil, it was even progressive in absolute terms (negative concentration index). A broader review of 31 BIA studies in Africa, Asia, and Latin America (Anselmi *et al.*, 2015) concludes that total health spending tends to be regressive in absolute terms in low- and middle-income countries, with expenditure on primary healthcare being more equitable than expenditure on hospital services.

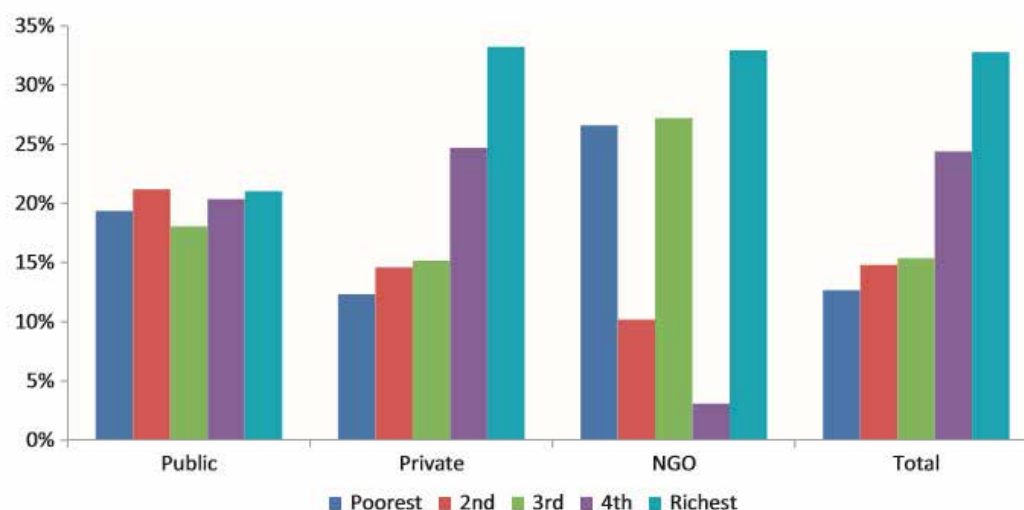
In a comparison study across 13 countries, Lustig (2015) finds that health spending benefits more the poorest 20% in Chile, Colombia, and Uruguay, while it benefits relatively more the richest 20% in El Salvador, Ethiopia, Guatemala, Indonesia, and Peru. In absolute terms, health spending was found to be pro-poor in Brazil, Chile, Colombia, South Africa, and Uruguay; roughly neutral in Armenia, Bolivia, and Mexico; and progressive in only relative terms in El

Salvador, Ethiopia, Guatemala, Indonesia, and Peru.

The next two figures show the distribution of benefits and need across population wealth quintiles and the relation between the share of need and the share of benefits in public and all providers respectively. Across all providers, the benefits accruing to the richest quintiles are three times higher than those accruing to the poorest quintile. However, public benefits are relatively equally distributed in the public providers.

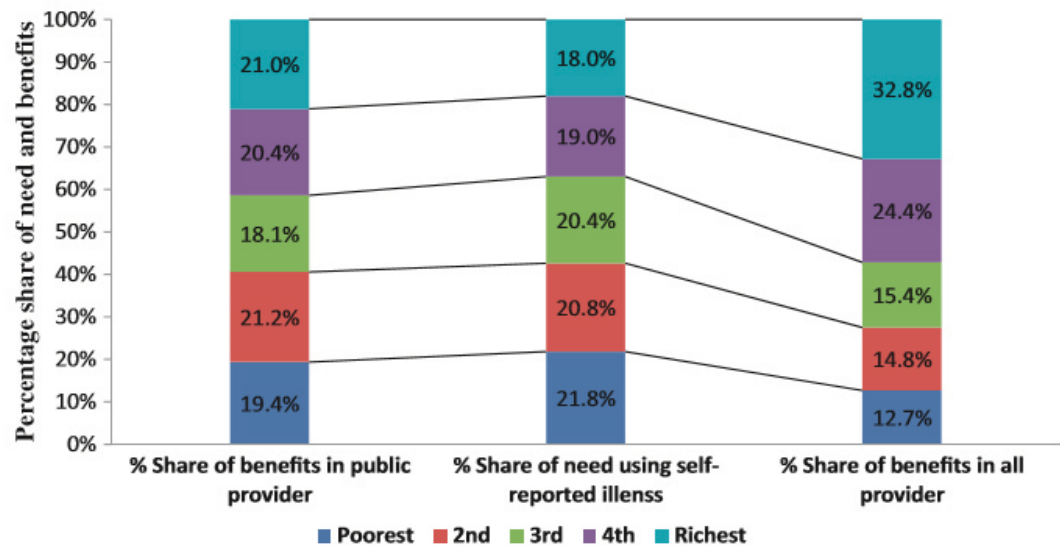
Of particular interest in this study is the way in which benefits are calculated. 'Different methods have been applied for estimating the healthcare benefits from different providers. For public facilities, the number of utilised services was multiplied by the weighted unit cost (from WHO-CHOICE). ... In estimating healthcare benefits for the private and NGO providers, self-reported out-of-pocket payments were used in order to reflect the prices of the respective services.' (Khan *et al.* 2016). This means that all sources of funding for health services were taken into account, including out-of-pocket expenditure. Rather than assessing the distribution of public subsidies, this study assesses the distribution of spending on public health services from all sources.

Figure 67: Distribution of healthcare benefits across socioeconomic quintiles and healthcare providers in Bangladesh, 2010



Source: Khan *et al.* (2016)

Figure 68: Distribution of healthcare benefits from public and all providers in relation with healthcare need across socioeconomic groups in Bangladesh, 2010

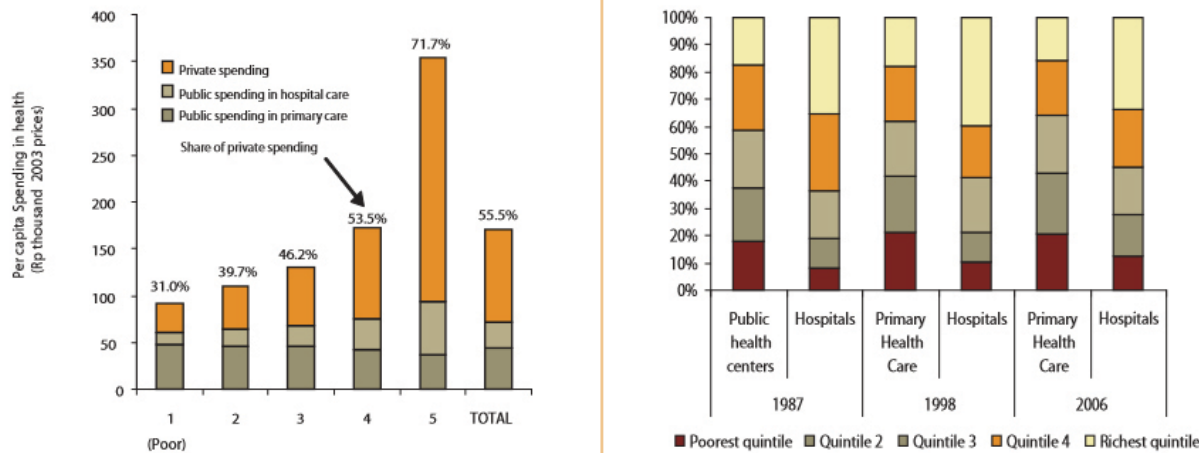


Source: Khan et al. (2016)

Through subsidies for hospital care, public spending generally benefits richer populations. While the public health services most utilised by the poor are basic healthcare facilities, Indonesia spends about 40% of public healthcare resources on regressively targeted subsidies to public hospitals (left-hand side of Figure

69). Of the funding that is spent on hospital care, the benefits that accrue to the poorest quintile of the population are about 13%, while the benefits for the richest quintile are about 34% (right-hand side of Figure 69). Spending on secondary care is a highly regressive way of allocating limited resources.

Figure 69: Benefit incidence of spending (public and private) (left) and healthcare utilisation by quintile (right)



Source: World Bank (2008)

3.4 Benefits and limitations of BIA

What are the benefits?

- **BIA brings to light inequities in the distribution of the benefits of public expenditure** (on individual services, transfers, or subsidies, or on entire sectors) between different sub-groups of the population. This is particularly useful for identifying and measuring inequities in the distribution of public resources among income groups (quintiles or deciles); between urban and rural areas; across different regions, provinces, or districts; and, in some countries and sectors, by gender.
- **BIA can be used both for *ex ante* and *ex post* analysis** of the distributional effects of expenditure or tax policy. While *ex post* incidence analysis examines the incidence of existing expenditure and taxes, *ex ante* analysis examines the distributional effects of changes in expenditure and tax policies.
- By highlighting inequities in public expenditure, BIA can contribute to policy analysis, dialogue, and decisions on corrective measures, such as the removal of cost barriers to access to services by the poor, investments in underserved areas, removal of regressive subsidies, or improved design and targeting of social transfers.

What are the limitations?

There are three important caveats regarding incidence analysis.

- **A standard BIA is static**, as it takes into account only the direct distributional effects of taxes, transfers, subsidies, and services at a single point in time. It ignores the indirect or ‘second-order’ distributional effects that might arise from changes in the behaviour of households and firms arising from taxes and expenditure—for example through their effects on investment, employment, and incomes.
- **Most simple BIA only shows how the benefits of public expenditure are distributed on *average*.** This does not tell us

how the distribution the benefits of expenditure would change if policy changed. An example would be the increase in the use of health facilities, especially among the poor, that might arise from an increase in expenditure to compensate for the removal of health facility charges. To analyse the distributional effects of policy changes, a BIA needs to take the form of *marginal* incidence analysis.

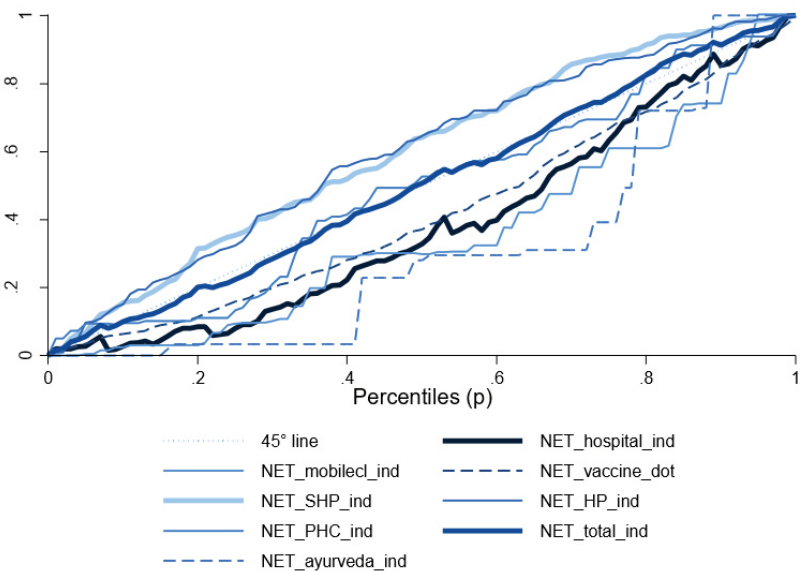
- **A BIA depends critically on data availability.** A BIA might suffer from the lack of adequately disaggregated expenditure data on different services or levels of facilities within sectors, or by rural and urban areas. It may be difficult to obtain data on expenditure by all government levels (e.g. local governments) or on user fees, or to include amortised capital spending. National household surveys may not provide adequate information on the beneficiaries of specific services or transfers.

What is good practice in BIA?

- If adequate data are available, disaggregate incidence analysis so as to highlight the incidence of expenditure on specific services, transfers, and subsidies, or the incidence of specific taxes.
- Use incidence analysis to feed into policy analysis and policy dialogue on specific measures to improve equity in public expenditure and taxation.

Figure 68 shows the distribution of net public health subsidies in Nepal across different health facility types. Net subsidies differ from gross subsidies in that they take into account the direct costs associated with accessing care, such as user fees or drug costs. The graph shows that lower levels of care are progressive (pro-poor), such as sub-health posts (SHP) and health posts (HP). Hospital care is regressive, as is Ayurveda (which accounts for a very small percental of total public health expenditure). Across all levels of care, public health expenditure in Nepal is equitably distributed (NET_total).

Figure 70: Concentration curves for the distribution of net public health subsidies, by real per capita income

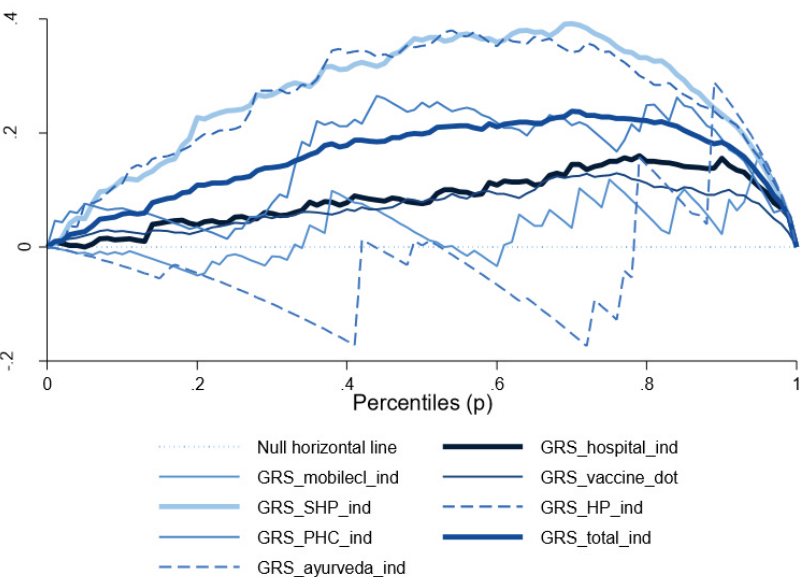


Source: Oxford Policy Management (2016)

Figure 71 shows that gross health subsidies are all absolutely progressive as they are above the ‘null horizontal line’, which means they overcompensate income distribution. This is not the case for Ayurveda care, which is consumed mainly by richer population

groups but accounts for an almost negligible share of total public health expenditure. In many respects, the Nepali health system is therefore laudably progressive.

Figure 71: Difference between concentration curves for gross subsidy of health services and Lorenz curve for real per capita household income



Source: Oxford Policy Management (2016)

4. The role of public financing in ensuring equitable access to nutrition services

The provision of free or heavily subsidised nutrition services is justified on both efficiency and equity grounds. The efficiency argument is that these services have substantial externalities in the form of social benefits that would not be taken into account if the provision of these services were left entirely to market forces. From an equity perspective, public financing helps ensure access to services that are regarded as social rights and are essential for poverty reduction.

Households often have to assume significant costs to access services. These can be direct costs, such as the cost of medical consultations, drugs, laboratory services, or hospitalisation; indirect costs, like the cost of travel to a health centre; or opportunity costs, such as the loss of earnings from the time taken to access or use a service.

Direct, indirect, and opportunity costs can act as financial barriers that restrict access to services, particularly by the poor.

As was highlighted in Module 7 on Universal Health Coverage, the large share of healthcare expenditure

borne privately by households in many developing countries hinders access to primary healthcare and the associated nutrition interventions. National health accounts indicate that governments pay for only about half of health expenditure in middle-income countries and slightly less than 40% in low-income countries (Table 26). The proportion is lowest in South Asia (33%).

As insurance markets are very narrow in developing countries, most private health expenditure is out-of-pocket, meaning that payment is made at the moment a service is accessed with no risk-sharing or cost-smoothing. Besides limiting access to essential healthcare, especially by the poor, this can result in unpredictable 'lumpy' expenditures in response to illness, which can have impoverishing effects.

Most demographic and health surveys provide data on the reasons cited by women for not using health services. Almost invariably, the main reasons given are cost and distance—the latter not only reflecting supply-side deficiencies in the provision of health facilities, but also the travel and time costs that users must bear to reach distant facilities.

Table 26: Public and out-of-pocket private health expenditure, 2014

	Low-income countries	Middle-income countries	South Asia	East Asia and Pacific
Public health expenditure (percentage of total health expenditure)	42.4	51.9	33.0	66.0
Out-of-pocket health expenditure (percentage of private health expenditure)	64.5	75.3	89.4	74.2
Out-of-pocket health expenditure (percentage of total health expenditure)	37.2	36.2	61.5	25.2

Source: World Bank, World Development Indicators

Improving equity in access to health services requires demand-side measures to address financial access barriers, as well as supply-side measures to improve the availability and quality of health services in underserved areas and communities.

Some supply-side measures, such as the provision of basic preventive and curative services closer to users (for example through the use of community health workers), can also have positive effects on the demand side by lowering costs for poor families. For example, delivering treatment of acute malnutrition through community workers rather than through a facility-based approach or as part of the Community-Based Management of Acute Malnutrition (CMAM) programme providing caregivers with take-home Ready-to-Use-Therapeutic Foods (RUTF) to reduce cost of care.

Pure demand-side policy options to improve access include the partial or total abolition of user fees (effectively a reversal of the cost recovery policies introduced in many developing countries during the period of structural adjustment in the 1980s and 1990s) and the development of health insurance mechanisms. In both cases, improvements in demand (in other words, higher utilisation of services) need to be accompanied by improvements in supply to meet this additional demand and to avoid the erosion of quality.

There are important constraints on the development of health insurance as a mechanism for improving equitable access to health services in developing countries. Private health insurance is available and affordable only for a tiny minority, usually in the top one or two income percentiles. Social health insurance, which is linked to employment and co-financed by employers, is redistributive in nature (from higher- to lower-paid workers and from the healthy to the sick) but available in only a few developing countries. Even where it exists, it is restricted to those working in the formal sector of the economy, who comprise less than 10% of the

employed population in most low-income countries. The mass of poor and near-poor households, who gain their livelihoods in the informal sector, are excluded.

There have been attempts to widen health insurance coverage through community-based mutual health organisations (MHOs) and national health insurance schemes. The former have never achieved more than marginal coverage in developing countries.⁵² The reasons for this are their voluntary nature, a weak insurance culture, low contributory capacity (in poor communities), adverse selection (with membership concentrated among those at greater risk of needing treatment), weak community-level management capacity (and precarious dependence on donor-funded non-governmental organisations (NGOs)), and small risk-sharing pools.

National health insurance schemes set up by governments can overcome some of the administrative problems experienced by MHOs and provide larger risk pools. However, these schemes face some of the same constraints, including the low contributory capacity of households and the weak insurance culture in poor communities. They also have to cope with the administrative burden of collecting small premiums from a mass of atomised contributors in the informal sector, without the advantages of employment-based automatic payroll deduction mechanisms, and they thus have high transaction costs.

The alternative is to provide services for free—or, if fiscal space is limited, to provide those services that are the most essential, such as maternal and child health services, without charge. This policy has been applied in developing countries such as Cuba, Mauritius, and Sri Lanka that did not introduce charges in their health services during the structural adjustment period, and which today have some of the best child and maternal health indicators in the developing world.

⁵² For example, MHOs have enrolled between 0% and 4% of the population in the francophone countries of West Africa (UNICEF, 2009).

5. Concluding remarks

Equity means fairness, or the achievement of equality of opportunity and outcomes. It is a critical dimension of budget policy, as public finances affect living standards and access to services differently for different sub-groups of the population (and children). The impact of the COVID-19 pandemic has been unevenly distributed across societies, often disproportionately affecting the poorest and most vulnerable. Understanding how public financing for nutrition can influence these inequities is essential for mitigating and reversing them.

Equity in public expenditure concerns the incidence (distribution) of the public expenditure on services, subsidies, and transfers. Equity considerations are critical in making policy choices about the mechanisms for financing the provision of health and nutrition services. There is a strong argument for subsidisation of these services and for fee abolition—along with complementary measures to tackle other

indirect cost barriers to service utilisation by the poor (such as social transfers), as well as adequate financing on the supply side to ensure that services are adequate to cope with demand.

Insurance is another option, in the case of health financing. Without substantial government subsidisation, however, health insurance is unlikely to achieve high levels of population coverage. Even then it is likely to be only a second-best solution from an equity perspective, as the poorest are least likely to enrol, pay contributions, and benefit.

Whatever the demand-side approach adopted (user fee abolition; social transfers; insurance), it is crucial to ensure that health facilities receive adequate resources to compensate for any loss in fee revenue and to meet the increases in demand. If this does not occur, demand-side equity measures will lead to a fall in the quality of services on the supply side.

Ideas for further reading

- Andrews, M., Cangiano, M., Cole, N., De Renzio, P., Krause, P., and Seligmann, R. (2014) 'This is PFM', Working Paper No. 285, July, Center for International Development at Harvard University, available at: www.hks.harvard.edu/sites/default/files/centers/cid/files/publications/faculty-working-papers/285_Andrews_This+is+PFM.pdf (accessed 03 January 2020). This short note tries to demystify the concept, of PFM, drawing on perspectives of specialists in the area who work in different contexts and bringing together different views from academia, the multilateral and bilateral development agencies, think-tanks, government, and civil society.
- Brown, S. (2016) 'How to engage in budget cycles and processes to leverage government budgets for children,' PF4C Technical Note Guidance Series, No. 1, UNICEF, available at: www.unicef.org/socialpolicy/files/Engaging_in_Budget_Cycles_and_Processes_FINAL.pdf. Focus on pp. 14–17 on Identifying key entry points. (4 pages)
- D'Alimonte, M. (2020). As the pandemic shrinks fiscal space, will governments prioritize nutrition funding?, available at: <https://r4d.org/blog/as-the-pandemic-shrinks-fiscal-space-will-governments-prioritize-nutrition-funding/>
- de Wijn, M. (2016) 'Intergovernmental Fiscal Transfers', PF4C Technical Note Guidance Series, No. 2, UNICEF, available at: www.unicef.org/socialpolicy/files/Intergovernmental_Fiscal_Transfers_DRAFT.pdf. Read pp. 2–12 (11 pages).
- Development Initiatives (2018) '2018 Global Nutrition Report: shining a light to spur action on nutrition', Development Initiatives, Bristol, UK, available at: https://globalnutritionreport.org/documents/352/2018_Global_Nutrition_Report.pdf. **Read Chapter 2 and Chapter 5.**
- Fan, V. and Glassman, A. (2014) 'Going local', *Finance and Development*, available at: www.imf.org/external/pubs/ft/fandd/2014/12/fan.htm (4 pages). This brief shows how many tough decisions on how to allocate public health funds efficiently and effectively are made, not in a capital city but by regional and local governments.
- FAO, (2020). Impacts of COVID-10 on food security and nutrition: developing effective policy responses to address the hunger and malnutrition pandemic. Available at: <http://www.fao.org/3/cb1000en/cb1000en.pdf>
- Fracassi, P. and Picanyol, C. (2015, updated 2016) 'Tracking government investments for nutrition at country level' (version 2), SUN, available at: <http://scalingupnutrition.org/wp-content/uploads/2016/04/Guidance-Note-for-SUN-Countries-on-the-3-Step-Approach-Version-2.pdf>. The 3-step approach to track on-budget resources for nutrition has been used by 30 out of the 56 member countries of the SUN Movement in 2015. This guidance note builds on this experience to refine the approach and respond to the queries raised in its first year of operationalisation.

- Gauthier, B. and Ahmed, Z. (2012) Public Expenditure Tracking Surveys and Quality Service Delivery Survey Guidebook, World Bank, available at: <https://dx.doi.org/10.2139/ssrn.3486002>. This PETS/QSDS guidebook aims to assist practitioners in using these instruments and explaining why and how to use them. The guidebook is intended to improve the quality and comparability of surveys by providing guidance for design and implementation of these surveys and providing links to related resources and reports/documents, including standardised survey instruments and indicators. (127 pages)
- Heidkamp, R. *et al.* (2020) 'How can we realise the full potential of health systems for nutrition?' *BMJ*, BMJ:10.1136/bmj.l6911, available at: <https://www.bmj.com/content/368/bmj.l6911> [6 pages]
- Heller, P., Katz, M., Debrun, X., Thomas, T., Koranchelian, T., and Adenauer, I. (2006) 'Making fiscal space happen: managing fiscal policy in a world of scaled-up aid', IMF Working Paper, available at: www.imf.org/external/pubs/ft/wp/2006/wp06270.pdf (45 pages). This paper discusses what low-income countries can do to shape fiscal policy frameworks that are ambitious in trying to absorb additional aid while still ensuring longer-term sustainability for government expenditure programmes and finances. Focus on 'Conclusions', pp. 42–44.
- Johns, B., Baltussen, R., and Hutubessy, R. (2003) 'Programme costs in the economic evaluation of health interventions', *Cost Effectiveness and Resource Allocation* 1(1), available at: www.resource-allocation.com/content/1/1/1. (9 pages)
- Khan, A., Ahmed, S.M., Sarr, C. *et al.* (2021). Nourishing nations during pandemics: why prioritize fish diets and aquatic foods in Africa. *Maritime Studies*. Available at: <https://doi.org/10.1007/s40152-021-00236-z>
- Laborde, D., Martin, W., & Vos, R. (2021). Impacts of COVID-19 on global poverty, food security and diets: Insights from global model scenario analysis. *Agricultural Economics*. 2021; 52: 375– 390. <https://doi.org/10.1111/agec.12624>
- Markandya, A., Salcone, J., Hussain, S., Mueller, A., (2021). Covid, the environment and food systems: Contain, Cope and Rebuild. Available at: <https://www.frontiersin.org/articles/10.3389/fenvs.2021.674432/full>
- Okwero, P., Tandon, A., Sparkes, S., McLaughlin, J., and Hoogeveen, J.G. (2010) 'Fiscal space for health in Uganda', World Bank Working Paper No. 186, available at: <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/Peer-Reviewed-Publications/WP186FiscalSpaceforHealthinUgandapdf.pdf> (74 pages). This report reviews the performance of Uganda's health sector and assesses options for increasing total health spending and improving the efficiency of health spending to improve HNP outcomes. Section 7 deals specifically with fiscal space. Focus on Chapter 7, 'Fiscal space realities for the Ugandan health sector', pp. 49–58.
- Oxford Policy Management (2014) 'Fiscal space and innovative financing for the Tanzanian health sector', Oxford, available at: www.who.int/health_financing/events/2_opm_fiscal_space_tanzanian_health_sector.pdf (22 slides). This PowerPoint presentation estimates the level of financial resources that Tanzania can make available for the health sector. It then estimates how and over what time period Tanzania will be able to generate enough resources for UHC.

- Pisani, E. (2014) 'Indonesia in pieces: the downside of decentralization', *Foreign Affairs* (July/August), available at: www.foreignaffairs.com/articles/southeast-asia/2014-05-29/indonesia-pieces (7 pages). Pisani relates some of the difficulties encountered in Indonesia's extensive decentralisation and considers the implications for national policy and equitable provision.
- Robinson, M. (2011) 'Is programme budgeting unworkable?', available at: <http://pfmresults.com/is-program-budgeting-unworkable-.html>. (2 pages)
- Robinson, M. (2013) 'Getting performance budgeting right', available at: <http://pfmresults.com/getting-performance-budgeting-right.html>. (2 pages)
- Shaikh, B. T., & Ali, N. (2020). COVID-19 and fiscal space for health system in Pakistan: It is time for a policy decision. *The International journal of health planning and management*, 35(4), 813–817. <https://doi.org/10.1002/hpm.2986>
- Shekar, M., Kakietek, J., Dayton Eberwein, J., and Walters, D. (2017) 'An investment framework for nutrition: reaching the global targets for stunting, anemia, breastfeeding, and wasting', World Bank, Washington DC, available at: <https://openknowledge.worldbank.org/handle/10986/26069>. **Read Chapter 1.**
- Sida (2007) 'Introduction to PFM in Development Cooperation', Chapter 1 in *Handbook on Public Financial Management in Development Cooperation: A Handbook for Sida Staff*, Department for Policy and Methodology, April, pp. 9–16, available at: www.sida.se/contentassets/caf5be28d6a740b8b43256a040402dcc/public-finance-management-in-development-co-operation_1394.pdf
- Sida (2007) 'Introduction to PFM in Development Cooperation', Chapter 1 in *Handbook on Public Financial Management in Development Cooperation: A Handbook for Sida Staff*, Department for Policy and Methodology, April, available at: www.sida.se/contentassets/caf5be28d6a740b8b43256a040402dcc/public-finance-management-in-development-co-operation_1394.pdf. Read Chapter 1 of the Sida Handbook on PFM, **pp. 9–16**. This chapter provides a brief introduction to PFM for non-PFM practitioners, including an overview of the budget cycle. (8 pages)
- Simson, R. and Welham, B. (2014) 'Incredible budgeting: budget credibility in theory and practice', Working Paper 400, July, Overseas Development Institute, available at: www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9103.pdf. This paper explores the issues of budget credibility and what can be done when credibility represents a problem for policy implementation. Read Chapters 2 and 3 (pp. 5–22) on 'Why budgets may lack credibility' and 'Budget credibility in practice'. (17 pages)
- Simson, R., Sharma, N., and Aziz, I. (2011) 'A guide to PFM literature', Overseas Development Institute, available at: www.odi.org/publications/6242-public-financial-management-pfm-guide. This guide has been prepared for people seeking to deepen their knowledge on PFM in developing countries. It caters to the needs of newcomers to the field who want to familiarise themselves with the introductory PFM literature, as well as practitioners broadening their PFM knowledge beyond their own area of expertise. (30 pages)

- Singh, C., Shrivastava, S., Singh, G., & Acharya, N. (2019). Delivering Nutrition to Pregnant Women. *Economic & Political Weekly*, 54(20), 31, available at: <http://www.cbgaindia.org/wp-content/uploads/2019/05/EPW-Piece-May-19-2019.pdf> Provides an example from a district in India of how gaps in the planning and budgeting process leads to poor delivery of nutrition services
- Smoke, P. (2015) 'Decentralisation, professional development reading pack', GSDRC, available at: www.gsdr.org/docs/open/reading-packs/DecentralisationRP.pdf (5 pages). This paper provides an overview of the research on the following questions: what is meant by decentralisation and why is it so popular? How well has decentralisation worked in practice? Why has decentralisation been so challenging in practice and what do we know (or think we know) about making it work more effectively? What are some of the prominent emerging trends in decentralisation reform?
- UNDP (2019) 'Fiscal transfers in Asia: challenges and opportunities for financing sustainable development at the local level', United Nations Development Programme, Bangkok, available at: www.undp.org/content/dam/undp/library/prosperity/inclusive-growth/RBAP-2019-Fiscal-Transfer-in-Asia.pdf. Long report that summarises the current status of fiscal decentralisation in Asia.
- United Nations, (2020). Policy Brief: The impact of COVID-19 on Food Security and Nutrition. Available at : <https://unsdg.un.org/sites/default/files/2020-06/SG-Policy-Brief-on-COVID-Impact-on-Food-Security.pdf>
- WHO (2011) 'Health accounts methodology and health account tools', available at: www.who.int/health-accounts/methodology/en/ and www.who.int/health-accounts/tools/en/. The WHO website provides information, methodology, tools, and data for the SHA 2011
- World Bank (2009) 'Preparing PER for human development', World Bank, Washington DC, available at: <http://siteresources.worldbank.org/EXTPERGUIDE/Resources/PER-Complete.pdf>. The earlier World Bank guidance on PER remains a useful resource with clear explanations, checklists, examples of policy, and analytical questions and calculations. The guidance also includes specific guidelines for applying PERs in the health, education, and social protection sectors, as well as overall guidance for human development.

For those interested in seeing how VfM analysis is applied in nutrition, here are optional supplementary readings:

- Puett, C., Sadler, K., Alderman, H., Coates, J., Fiedler, J., and Myatt, M. (2012) 'Cost-effectiveness of the community-based management of Severe Acute Malnutrition by community health workers in Southern Bangladesh', *Health Policy and Planning* 2012, pp. 1–14, available at: <https://academic.oup.com/heapol/article/28/4/386/966295/Cost-effectiveness-of-the-community-based>. This article calculates cost-effectiveness ratios to show the relative VfM of community- and hospital-based management of SAM. (14 pages)
- Hoddinott, J., Rosegrant, M., and Torero, M. (2012) 'Investments to reduce hunger and undernutrition, study for the Copenhagen Consensus', International Food Policy Research Institute, Washington DC, available at: www.copenhagenconsensus.com/sites/default/files/hungerandmalnutrition.pdf. Read **Section 3.3 (pp. 33–38) and Tables 5.17–5.19 (pp. 66–68)**. This makes an investment case for *The Lancet* package of measures to reduce stunting. (8 pages)

- King, J. and OPM (2018). 'The OPM approach to assessing value for money: A guide'. Oxford: Oxford Policy Management Ltd, available at: <https://www.opml.co.uk/files/Publications/opm-approach-assessing-value-for-money.pdf?noredirect=1>. Read the Executive Summary (3 pages).

Cost of inaction in nutrition:

- Pakistan: Bagriansky, J. *et al.* (2017) 'The economic consequences of undernutrition in Pakistan: an assessment of losses', World Food Programme, available at: https://sunpc.org.pk/wp-content/uploads/2019/06/Economic-Consequences-of-Undernutrition-An-Assessment-of-Losses-Final-AK_170414_electronic-copy.pdf.
- Timor-Leste: Bagriansky, J. *et al.* (2014) 'The economic consequences of malnutrition in Timor-Leste', UNICEF, available at: www.dropbox.com/s/lmzxa6rsq4qlsds/Timor%20draft%20090714_Economic%20Consequences%20of%20Malnutrition%2Bcover%2BAnnex.pdf?dl=0.
- Cambodia: Bagriansky, J., Champa, N., Pak, K., Whitney, S., and Laillou, A. (2014) 'The economic consequences of malnutrition in Cambodia, more than 400 million US dollar lost annually', *Asia Pacific Journal of Clinical Nutrition* 23(4), p. 524, available at: <http://apjcn.nhri.org.tw/server/APJCN/23/4/524.pdf>.

The following are some suggestions for optional further reading on the topics covered in this module.

- McIntyre, D. and Ataguba, J. (2011) 'How to do (or not to do) ... a benefit incidence analysis', *Health Policy and Planning* 26, pp. 174–182, available at: <https://academic.oup.com/heapol/article/26/2/174/592398>.
- This paper provides a step-by-step guide to conducting a BIA in the health sector. However, be aware that it goes beyond equity in public finances as (unlike traditional BIA) it also includes private expenditure on health. (8 pages)
- Demery, L. (2000) 'Benefit incidence: a practitioner's guide', Poverty and Social Development Group, Africa Region, World Bank, July, available at: <http://documents.worldbank.org/curated/en/2000/07/6573903/benefit-incidence-practitioners-guide>. (58 pages)

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Annex 1

Table 1: Coverage of selected nutrition-specific services

Country	Vitamin A supplementation coverage (% of children, 6–59 months)		Proportion of children 6–59 months with SAM admitted for treatment (%)		Proportion of women who reported taking iron tablets or syrup for 90+ days during most recent pregnancy (%)		Proportion of women with a live birth who received iron tablets or syrup during ante-natal care		Pregnant women receiving prenatal care of at least four visits (% of pregnant women)	
	Value	Year	Value	Year	Value	Year	Value	Year	Value	Year
East Asia and Pacific										
Cambodia	73	2017	5.6	2017	75.5	2014	95.6	2014	75.6	2014
Indonesia	62	2017	0.7	2017	43.9	2017	86.1	2017	83.5	2013
Korea, DPR	90	2017							93.5	2009
Lao PDR	57	2017							36.9	2012
Mongolia	83	2017							89.6	2014
Myanmar	89	2017	5.8	2017	59.3	2016	87.4	2016	58.6	2016
Papua New Guinea	15	2012	10.9	2017						
Philippines	68	2016	0.1	2017	50.6	2017	91.9	2017	86.5	2017
Timor-Leste	66	2017			12.8	2016	85.2	2016	76.7	2016
Vietnam	99	2017							73.7	2014
South Asia										
Afghanistan	95	2017	39.6	2017	6.8	2015	42.4	2015	17.8	2015
Bangladesh	99	2017					54.8	2007	31.2	2014
Bhutan	45	2013							85	2015
India	71	2016			38.7	2016	77.7	2016	51.2	2016
Maldives	69	2017			46.3	2017	91	2017	81.6	2017
Nepal	81	2017	53.0	2017	70.9	2016	90.9	2016	69.4	2016
Pakistan	92	2017	10.2	2017	29.4	2018	58.5	2018	51.4	2018
Sri Lanka	93	2017							92.5	2007

Sources: World Bank Health, Nutrition, and Population Database; SUN Monitoring, Evaluation, Accountability, and Learning Database; Demographic Health Surveys StatCompiler

Annex 2

Table 2: Main types of taxes

Type of tax	Key considerations
Consumption/sales taxes	<ul style="list-style-type: none"> Can take the form of VAT and excise taxes (collected on goods such as beer, cigarettes, and petroleum whose consumption creates negative externalities). A negative externality is a consequence of a transaction to a third party, such as a child's passive smoking from their parents' cigarettes. It is possible to exempt necessary basic goods that many low-income families depend on while setting higher rates for luxury goods that are principally consumed by wealthier families (e.g. luxury cars). Raising 'sin taxes' (on alcohol or tobacco) can be politically acceptable, especially if the revenue is directed towards social expenditure.
Income taxes	<ul style="list-style-type: none"> Income taxation is often progressive, meaning people with lower income pay a lower percentage of that income in tax than those with higher income, aiming to reduce inequalities. One of the largest forms of tax evasion. Income taxes are the principal redistribution tool available to policymakers and can effectively promote income equality if properly designed.
Corporate taxes and taxes to the financial sector	<ul style="list-style-type: none"> The global trend is lower corporate taxes and licence costs and fees to encourage entrepreneurial risk-taking and generate new economic activity. The potential trade-offs need to be carefully balanced to ensure that the short-term gains from increased business activity do not come at the expense of foregone essential investments for human and economic development. There has been much debate on taxing financial sector transactions to fund social investments, which are relatively easy to implement and highly progressive. Governments can increase fiscal space by taking concerted actions to minimise tax evasion and/or aggressive avoidance of taxes on the part of large companies, especially transnational ones that shift profits and losses around the world so that they are recorded in different jurisdictions to minimise liabilities.
Natural resource extraction taxes	<ul style="list-style-type: none"> These can be a core source of income for countries that rely on non-renewable natural resources as a main source of wealth. A government may raise revenues either by directly extracting the natural resources (through a state-owned enterprise, joint ventures, or other forms of co-extraction) or by selling off the exploitation rights and taxing the profits. Both can provide transitory revenues for social investments. In six countries that recently discovered significant reserves of oil, gas, or mineral resources, the potential contribution of natural resources for human development over the first 10 years of production was estimated to be in the range of 2%–6% of GDP or 9%–31% of existing government revenue, or US \$20–\$52 per capita per year—enough to be transformative if invested effectively (Oxford Policy Management, 2015).
Import/export tariffs	<ul style="list-style-type: none"> Tariffs have been a source of development finance for centuries, but most developing countries have been reducing rates since the 1990s often associated with trade liberalisation. Many developing countries have not recovered the tariff revenue lost through gains from freer trade and have a strong rationale to examine current tariff rates. In countries undergoing export-driven commodity booms, raising export tariffs can lead to sizeable fiscal space.
Property and inheritance taxes	<ul style="list-style-type: none"> This is a progressive tax, requiring large landowners and wealthier generations to contribute more to government revenues. There are many advantages: fairness, difficulty to evade, affecting those persons with assets whose value has increased by public services and infrastructure. Higher property taxes can also transform into a robust source of funding for local governments.
Airline and hotel taxes; taxes on tourism	<ul style="list-style-type: none"> Increasing taxes charged at airports or on the sale of airline tickets is becoming increasingly popular, especially in small island states and emerging tourist destinations.



CONTACT US

UNICEF East Asia and Pacific Regional Office (EAPRO)

19 Phra Atit Road
Pranakorn, Bangkok 10200
Thailand

Telephone: +66 2 356 9499
Fax: +66 2 281 6032
Email: asiapacificinfo@unicef.org

UNICEF Regional Office for South Asia (ROSA)

P.O.Box 5815, Lekhnath Marg
Kathmandu, Nepal

Telephone: +977-1-4417082
Fax: +977-1-4418466
Email: rosa@unicef.org